**BORING NUMBER:** MWDEP-1A

Date: March 27, 2003 Client: West Virginia DEP/OER Project No.: 02-0119-003 Project: PPG Industries, Inc. M. Kauffer Field Engr/Geo: Location: Natrium, West Virginia Water Level Information Driller: Rick Moore 40.5' At Completion: 40.5' Method: Immediate: Auger Rig

Depth			Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
0-2'	15" - Light brown, sand clay, no odor, medium stiff, moist.	1	0-2'	15"	2-5-5-7 0730	8.0
	9" - No recovery.					
2'-5'	No recovery.					
5'-7'	2" - Light brown, sandy clay, no odor, medium stiff, moist.	2	5'-7'	12"	2-3-2-3 0740	9.2
	10" - Light brown, silty sand, with fine grain gravel, no odor, loose, moist.					
	12" - No recovery.					
7'-10'	No recovery.					
*10'-12'	12" - Light brown, silty sand with coarse grain gravel, no odor, loose, very moist.	3	10'-12'	12"	2-2-3-3 0755	10.1
	12" - No recovery.					
12''-15'	No recovery.					
15'-17'	20" - Light brown, silty sand, no odor, loose, very moist.	4	15'-17'	20"	3-4-6-5 0805	9.4
	4" - No recovery.					
17'-20'	No recovery.					
20'-22'	1" - Dark charcoal-like layer, no odor, loose.	5	20'-22'	18"	1-5-6-4	9.1
	17" - Light brown, silty sand with coarse grain gravel, no odor, loose, very moist.					
	6" - No recovery.					
22'-25'	No recovery.					
*25'-27'	12" - Light brown, silty sand, fine grain gravel, no odor, loose, very moist.	6	25'-27'	12'	1-1-4-6 0825	13.8
	12" - No recovery.		:			
27'-30'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: MWDEP-1A (Continued)

Client: West Virginia DEP/OER

Project: PPG Industries, Inc.

Project No.: 02-0119-003

Location: Natrium, West Virginia

Priller: Rick Moore

Water Level Information

Method: Auger Rig Immediate: 40.5' At Completion: 40.5'

Depth			Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
30'-32'	12" - Light brown, silty sand with fine grain gravel, no odor, loose, very moist.	7	30'-32'	12"	1-1-1-1 0835	8.9
	12" - No recovery.					
32'-35'	No recovery.					
35'-37'	12" - Light brown, silty sand with fine grain gravel, no odor, loose, very moist.	8	35'-37'	12"	0845	11.0
	12" - No recovery.					
37'-40'	No recovery.					
40'-42'	12" - Light brown, silty sand with fine and coarse grain gravel, no odor, loose, saturated.	9	40'-42'	12"	2-2-9-10 0900	10.8
	Water table 40.5' T.D. 48' (well set at 47') Sand 47'-35' Bentonite 35'-33'					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: MWDEP-1B

Client: West Virginia DEP/OER Date: March 27, 2003

Project: PPG Industries, Inc. Project No.: 02-0119-003

Field Engr/Geo:

M. Kauffer

Driller: Rick Moore Water Level Information

Natrium, West Virginia

Location:

Method: Auger Rig Immediate: 40' At Completion: 40'

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-2'	20"- Light brown, sandy clay, no odor, medium stiff, moist.	1	0-2'	20"	3-4-5-4 1230	No PID
	4" - No recovery.					
2'-5'	No recovery.					
5'-7'	10" - Light brown, silty sand with fine and coarse grain gravel, no odor, loose, moist.	2	5'-7'	10"	2-2-3-2 1240	8.0
	14" - No recovery.					
7'-10'	No recovery.					
10'-12'	12" - Light brown, silty sand, dark charcoal like patch at 10'-10.3', no odor, loose, moist.	3	10'-12'	12"	2-1-2-2 1300	11.0
	12" - No recovery.					
12'-15'	No recovery.					
15'-17'	15" - Light brown, silty sand with dark charcoal-like patched 15'-15.5', no odor, loose, moist.	4	15'-17'	15"	2-2-3-3 1300	9.2
l	9" - No recovery.					
17'-20'	No recovery.					
20'-22'	15" - Light brown, silty sand, with coarse grain gravel, no odor, loose, very moist at 21'.	6	20'-22'	15"	3-8-9-8 1310	9.3
	9" - No recovery.				į	
22'-25'	No recovery.					
25'-27'	18" - Light brown, silty sand with fine and coarse grain gravel, no odor, loose, very moist.	7	25'-27'	18"	1-5-4-3 1315	15.5
ì	6" - No recovery.				i	
27'-30'	No recovery.					
30'-32'	12" - Light brown, silty sand with coarse grain gravel, no odor, loose, very moist.	8	30'-32'	12"	2-2-7-7 1325	6.8
	12" - No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**MWDEP-1B** (Continued) **BORING NUMBER:** 

March 27, 2003 Client: West Virginia DEP/OER Date: Project No.: 02-0119-003 Project: PPG Industries, Inc. **Location:** Natrium, West Virginia Field Engr/Geo: M. Kauffer Water Level Information **Driller:** Rick Moore 40' At Completion: 40'

Immediate:

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*35'-37'	15" - Light brown, silty sand with coarse grain gravel, no odor, loose, very moist.	9	35'-37'	15"	1-1-5-9 1335	9.7
	9" - No recovery.					·
37'-40'	No recovery.					,
	Due to heaving sand up in Auger, no more samples taken.					
	Water table 40' Bedrock at 85'					
:						
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

Method:

Auger Rig

BORING NUMBER: MWDEP-2A

West Virginia DEP/OER Client: Date: March 31, 2003 Project: PPG Industries, Inc. Project No.: 02-0119-003 Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer **Driller:** Water Level Information Rick Moore Method: Auger Rig Immediate: 41' At Completion: 41'

Depth			Samp	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
0-2'	10" - Brown, sandy clay with coarse grain gravel and concrete at 10" down, no odor, moist, medium stiff.	1	0-2'	10"	54-7-7 1445	4.4
	14" - No recovery.					
2'-5'	No recovery.					
5'-7'	12" - Light brown, sandy clay, no odor, medium stiff, moist.	2	5'-7'	12"	3-3-4-4 1500	3.7
į	12" - No recovery.					
7'-10'	No recovery.					
*10'-12'	10" - Light brown, silty sand, no odor, moist, loose.	3	10'-12'	10"	1-2-2-3 1510	15.3
İ	14" - No recovery.					
12'-15'	No recovery.					
15'-17'	8" - Light brown, silty clay with coarse grain gravel, no odor, very moist, loose.	4	15'-17'	8"	1-1-3-4 1520	11.9
	16" - No recovery.					
17'-20'	No recovery.					
20'-22'	15" - Light brown, silty sand with coarse grain gravel, no odor, very moist, loose.	5	20'-22'	15"	5-5-5-7 1530	10.3
	9" - No recovery.					
22'-25'	No recovery.					
25'-27'	15" - Light brown, silty sand with dark charcoal layer at ~26' (1" long), no odor, loose, very moist.	6	25'-27'	15"	1-2-4-6 1540	25.7
	9" - No recovery.					
27'-30'	No recovery.					
30'-32'	10" - Light brown, silty sand with coarse grain gravel, no odor, loose, very moist.	7	30'-32'	10"	1-1-2-5 1550	6.3
	14" - No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: MWDEP-2A (Continued)

West Virginia DEP/OER			Date: March	31, 2003
PPG Industries, Inc.			Project No.:	02-0119-003
Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Rick Moore		Water Le	vel Information	
Auger Rig	Immediate:	41'	At Completion:	41'
	PPG Industries, Inc. Natrium, West Virginia Rick Moore	PPG Industries, Inc. Natrium, West Virginia Rick Moore	PPG Industries, Inc.  Natrium, West Virginia  Rick Moore Water Le	PPG Industries, Inc.  Natrium, West Virginia  Rick Moore  Project No.:  Field Engr/Geo:  Water Level Information

Depth			Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
32'-35'	No recovery.					
35'-37'	12" - Light brown, silty sand with coarse grain gravel, no odor, loose, very moist.	8	35'-37'	12"	2-7-6-6 1600	6.6
	12" - No odor.					
37'-40'	No recovery.					
*40'-42'	12" - Light brown, silty sand with coarse grain gravel, no odor, medium dense, wet at 41'.	9	40'-42'	12"	2-10-8-6 1615	3.0
	12" -No recovery.					
	Well set at 47' sand pack 47-34.5 Bentonite 34.5- 32.5 Slurry Portland 2" - Bottom cap 10' - Screen 40' - Riser				·	
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

MWDEP-2B

 Client:
 West Virginia DEP/OER
 Date:
 April 1, 2003

 Project:
 PPG Industries, Inc.
 Project No.:
 02-0119-003

 Location:
 Natrium, West Virginia
 Field Engr/Geo:
 M. Kauffer

 Driller:
 Rick Moore
 Water Level Information

Method: Auger Rig Immediate: 32' At Completion: 41'

Depth			Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-2'	12" - Light brown, sandy clay with coarse grain gravel, no odor, soft moist.	1	0-2'	12"	3-3-4-6 1700	2.3
	12" - No recovery.					
2'-5'	No recovery.					
5'-7'	18" - Light brown, sandy clay, no odor, soft, very moist.	2	5'-7'	18"	2-4-5-4 1710	2.7
l	6" - No recovery.					
7'-10'	No recovery.					
10'-12'	2" - Light brown, sandy clay, no odor, soft, moist.	3	10'-12'	12"	2-3-3-3 1715	9.0
	10" - Light brown, silty sand with coarse and fine grain gravel with dark chemical patch at 11', no odor, loose, moist.					
<b>\</b> .	12" - No recovery.					
12'-15'	No recovery.					
15'-17'	10" - Light brown, silty sand with coarse and fine grain gravel, no odor, loose, moist.	4	15'-17'	10"	2-2-2-2 1725	9.2
1	14" - No recovery.					
17'-20'	No recovery.			1		
20'-22'	12" - Light brown, silty sand, no odor, loose, very moist.	5	20'-22'	12"	2-3-5-5 1735	7.4
22'-25'	No recovery.					
*25'-27'	15" - Light brown, silty sand, no odor, loose, moist.	6	25'-27'	15"	2-2-2-3 1745	9.4
1	9" - No recovery.					
27'-30'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: MWDEP-2B (Continued)

Client:	West Virginia DEP/OER			Date: April 1,	2003			
Project:	PPG Industries, Inc.			Project No.:	02-0119-003			
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer			
Driller:	Rick Moore		Water I	Level Information				
Method:	Auger Rig	Immediate:	32'	At Completion:	41'			

Depth	Day 1 diag CM Andala		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
30'-32'	8" - Light brown, silty sand with coarse grain gravel, no odor, medium dense, wet but not saturated.	7	30'-32'	8"	2-6-2-5 1750	6.6
1	16" - No recovery.					
32'-35'	No recovery.					
35'-37'	12" - Light brown, silty sand with coarse and fine grain gravel, no odor, medium dense, wet.	8	35'-37'	12"	3-4-8-9 1805	6.5
İ	12" - No recovery.					
37'-40'	No recovery.					
40'-42'	15" - Light brown, silty sand with coarse grain gravel, no odor, medium dense, saturated at 41'.	9	40'-42'	15"	0730	7.0
	9" - No recovery.			:		
	No more samples taken due to sand heaving.		ī			
	T.D. 85.5'					
						<u> </u>
						]
	*Soil samples submitted from noted depth interval					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

MWDEP - 3A

Client: West Virginia DEP/OER Date: March 28, 2003

Project: PPG Industries, Inc. Project No.: 02-0119-

Project: PPG Industries, Inc. Project No.: 02-0119-003

Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer

Driller: Rick Moore Water Level Information

Method: Auger Rig Immediate: 39' At Completion: 39'

Depth		,	Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
0-2'	18" - Black, cinder like material, coarse grain gravel, medium stiff, dry.	1	0-2'	18"	0805 4-8-12-8	7.1
	6" - No recovery.					
2'-5'	No recovery.					
5'-7'	12" - Dark brown, sandy clay with coarse grain gravel, medium stiff, slight sewage odor at 6', moist.	2	5'-7'	12"	0815 2-4-8-6	7.5
	12" - No recovery.					
7'-10'	No recovery.					
*10'-12'	20' - Light brown, sandy clay, no odor, medium stiff, moist.	3	10'-12'	20"	0825 2-3-4-5	7.3
	4' - No recovery.					
12'-15'	No recovery.					
15'-17'	8" - Light brown, silty sand with coarse and fine grain gravel, no odor, very moist, loose.	4	15'-17'	8"	0835	5.4
	16" - No recovery.					
17'-20'	No recovery.					
20'-22'	2" - Light brown silty sand with coarse grain gravel, no odor, very moist, loose.	5	20'-22'	2"	1-4-2-2 0850	No PID
	22" - No recovery.					
22'-25'	No recovery.					
25'-27'	15" - Light brown, silty sand with coarse grain gravel at 26', no odor, moist, loose, very moist.	6	25'-27'	15"	1-1-47 0900	5.5
27'-30'	No recovery.					
30'-32'	8' - Light brown, silty sand, no odor, loose, very moist. NOTE: Coarse grain rock at bottom of split spoon.	7	30'-32'	8"	0910	6.0
	16" - No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

MWDEP - 3A (Continued)

Client:	West Virginia DEP/OER			Date: March	27, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Rick Moore		Water I	Level Information	
Method:	Auger Rig	Immediate:	39'	At Completion:	:

Depth	Danietie of Metariele		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
32'-35'	No recovery.					
*35 -37'	12" - Light brown, silty sand with coarse and fine grain gravel, no odor, loose, very moist.	8	35' - 37'	12"	4-5-6-5 0925	8.5
	No more samples taken to due sand heaving in water table.					
	Water table 39' from PZ-6					
	Set well at 47' Sandpack 47-35 Bentonite 35-31.4 Slurry mix 31.4 - 2 Portland 2 - 0					
	*Soil Samples submitted from noted depth interval.					

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

MWDEP-3B

Client: West Virginia DEP/OER Date:

March 31, 2003

**Project:** Location: PPG Industries, Inc.

Project No.:

02-0119-003 M. Kauffer

Driller:

Natrium, West Virginia

Field Engr/Geo:

Rick Moore

Water Level Information

Method:

**Auger Rig** 

Immediate:

39' At Completion: 39'

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
0-2'	20" - Black, cinder like material, no odor, medium stiff, moist.	1	0-2'	20"	6-9-9-7 0850	1.6
	4" - No recovery.					
2'-5'	No recovery.				·	
5'-7'	3" - Black, cinder like material, no odor, medium stiff, moist.	2	5'-7'	12"	2-5-10-8 0900	2.4
	9" - Light brown, sandy clay, no odor, medium stiff, moist.					
	12' - No recovery.					
7'-10'	No recovery.					
10'-12'	4" - Light brown, sandy clay with coarse grain gravel, no odor, moist.	3	10'-12'	4"	3-7-7-9 0915	2.7
	20" - No recovery.					
12'-15'	No recovery.					
15'-17'	6" - Light brown, silty sand with coarse grain and fine grain gravel, no odor, loose, moist.	4	15'-17'	6"	1-4-3-4 0930	4.1
	18" - No recovery.					
17'-20'	No recovery.					
20'-22'	6" - Light brown, silty sand with coarse grain gravel, no odor, loose, moist.	5	20'-22'	6"	1-4-3-1 0940	2.7
	18" - No recovery.					
22'-25'	No recovery.					
*25'-27'	24" - Light brown, silty sand, no odor, loose, moist.	6	25'-27'	24"	0950	4.3
27'-30'	No recovery.					
30'-32'	10" - Light brown, silty sand with coarse grain gravel, no odor, loose, very moist.	7	30'-32'	10"	1-1-7-9 1000	3.9
32'-35'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

MWDEP-3B (Continued)

Client:	West Virginia DEP/OER			Date: March	31, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Rick Moore		Water L	evel Information	
Method:	Auger Rig	Immediate:	39'	At Completion:	39'

Depth	Description of Materials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
35'-37'	10" - Light brown, silty sand with coarse grain gravel, no odor, loose, very moist.	8	35'-37'	10"	2-2-5-5 1010	4.0
	14" - No recovery.					
37'-40'	No recovery.					
*40'-42'	8" - Light brown, silty sand with high concentration of fine grain gravel and some coarse grain gravel, no odor, loose, saturated.	9	40'-42'	8"	1-1-1-1 1020	5.6
	T.D. 85.6					
			=			
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** MWDEP-4A

Client: West Virginia DEP/OER

Project: PPG Industries, Inc.

Project No.: 02-0119-003

Location: Natrium, West Virginia

Priller: Rick Moore

Date: March 25, 2003

Project No.: 02-0119-003

M. Kauffer

Water Level Information

Immediate:

35'

At Completion:

35'

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
0-2'	15" - Light brown, sandy clay, no odor, medium stiff, moist. (Note: Liner core at 1.5" down)	1	0-2'	15"	2-2-5-6 0750	6.1
	9" - No recovery.				:	
2'-5'	No recovery.					
5'-7'	10" - Dark grey, sandy clay, slight sewage odor, soft, moist.	2	5'-7'	10"	2-3-2-2 0805	
	19" - No recovery.					
7'-10'	No recovery.					
*10'-12'	10" - Dark grey, sandy clay with liner core at 6" down, slight creosote smell, moist, soft then hard at 8" down.	3	10'-12'	10"	1-3-11-9 0815	=
	14" - No recovery. (NOTE: Sandstone in bottom of split spoon).					
12'-15'	No recovery.					
15'-17'	15" - Light brown, silty sand with coarse grain sandstone core at 12" down, no odor, medium dense, moist.	4	15'-17'	15"	2-3-4-6 0825	5.1
	9" - No recovery.					
17'-20'	No recovery.					
20'-22'	12" - Light brown, silty sand, no odor, loose, moist	5	20'-22	12"	2-2-7-6 835	5.0
	12" - No recovery.					
22'-25'	No recovery.					
25'-27'	18" - Light brown, silty sand, no odor, loose, very moist.	6	25'-27'	18"	3-6-6-6 0845	6.9
ì	6" - No recovery.					
27'-30'	No recovery.					
	*Soil samples submitted from noted depth interval.					

#### Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

Method:

Auger Rig

**BORING NUMBER:** 

MWDEP-4A (Continued)

 Client:
 West Virginia DEP/OER
 Date:
 March 25, 2003

 Project:
 PPG Industries, Inc.
 Project No.:
 02-0119-003

 Location:
 Natrium, West Virginia
 Field Engr/Geo:
 M. Kauffer

Driller: Rick Moore Water Level Information

Method: Auger Rig Immediate: 35' At Completion: 35'

Depth	D		Samp	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
30'-32'	15" - Light brown, silty sand, no odor, loose, very moist.	7	30'-32'	15"	2-3-4-3 0900	7.0
	9" - No recovery.					
32'-35'	No recovery.					
*35'-37'	15" - Light brown, silty sand, no odor, loose, saturated.	8	35'-37'	15"	2-3-6-6 0915	9.5
	9" - No recovery.					
	Set well at 42'.					
				<u> </u> 		
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

MW-4B

Client: West Virginia DEP/OER Date: March 24, 2003 02-0119-003 Project No.: **Project:** PPG Industries, Inc. Natrium, West Virginia Field Engr/Geo: M. Kauffer Location: Water Level Information **Driller:** Rick Moore 35' Immediate: 35' At Completion: Method: **Auger Rig** 

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-2'	18" - Light brown, sandy clay, no odor, medium stiff, moist. Note: Dark charcoal-like patch (2") at 1'.	1	0-2'	18"	3567 1115	3.3
	6" - No recovery.					
2'-4'	No recovery.					
5'-7'	12" - Light brown, sandy clay-mottled with dark specs (small areas), distinct odor, moist, soft. At bottom of split spoon there was a white liner core (Paper-like but stronger).	2	5'-7'	12"	2-1-1-9 1130	4.9
	12" - No recovery.			,		
7'-10'	No recovery.			ŀ		
*10'-12'	6" - Light brown, sandy clay, no odor, moist, medium stiff.	3	10'-12'	10"	1140	No PID
	4" - Dark, sandy clay (Black), distinct odor creosote odor, moist, medium stiff					
	12" - No recovery.					
12'-15'	No recovery.					
15'-17'	10" - Light brown, silty sand with fine and coarse gravel, creosote odor, very moist, very loose.	4	15'-17'	10"	2-1-4-5 1200	No PID
	14" - No recovery.					
17'-20'	No recovery.					
20'-22'	1" - Dark black, clay-like material, with white liner core, distinct odor, moist, soft.	5	20'-22'	18"	4-5-6-7 1210	4.3
	17" - Light brown, silty sand, slight odor, moist, loose.					
	6" - No recovery.					
22'-25'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

MW-4B (Continued)

West Virginia DEP/OER Date: March 24, 2003 Client: PPG Industries, Inc. Project No.: 02-0119-003 Project: Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia **Water Level Information Driller:** Rick Moore Immediate: 35' At Completion: 35'

Depth	D		Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
25'-27'	15" - Light brown, silty sand, no odor, moist, loose.	6	25'-27'	15"	3-3-4-4 1310	No PID
	9"- No recovery.					
27'-30'	No recovery.					
30'-32'	8" - Light brown, silty sand with fine and coarse grain gravel, no odor, very moist, loose.	7	30'-32'	8"	3-2-3-4 1336	No PID
	16" - No recovery.					
32'-35'	No recovery.					
35'-37'	12" - Light brown, silty sand with fine and coarse grain gravel, no odor, saturated, loose.	8	35'-37'	12"	5-4-5-4 1350	2.3
·	12" - No recovery.					
37'-40'	No recovery.					
40'-42'	8" - Light brown, silty sand with coarse grain gravel, no odor, saturated, loose.	9	40'-42'	8"	1-4-10-10 1415	2.5
42'-45'	No recovery.					
45'-47'	6" - Light brown, silty sand with fine grain gravel, no odor, loose, wet.	10	45' - 47'	6"	2-4-8-8 1435	No PID
	18" - No recovery.					
47'-50'	No recovery.					
50'-52'	15" - Light brown, silty sand with fine grain gravel, no odor, medium dense, wet.	11	50'-52'	15"	5-7-9-9 1450	3.1
	9" - No recovery.					
52'-55'	No recovery.					
55'-57'	No recovery.	12	55'-57'		1515	
	-Sand Heaving.					
	-No more samples taken.					
	Bedrock at 78.75 BGS. Set 10' screen.					
	*Soil samples submitted from noted depth intervals.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

Method:

**Auger Rig** 

**BORING NUMBER:** 

MWDEP-5A

Date: April 2, 2003 Client: West Virginia DEP/OER Project No.: 02-0119-003 Project: PPG Industries, Inc. M. Kauffer Field Engr/Geo: Location: Natrium, West Virginia **Water Level Information Driller:** Rick Moore Immediate: 25' At Completion: 25' **Auger Rig** Method:

Depth	Description of Metaviele		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
0-2'	6" - Light brown, sandy clay, no odor, dry, medium stiff.	1	0-2'	12"	3-3-9-9 1310	5.0
	6" - Cinder like material, no odor, moist, medium dense.					
	12" - No recovery.					
2'-5'	No recovery.					
5'-7'	12" - Light brown, sandy clay, no odor, medium stiff, moist.	2	5'-7'	12"	2-3-4-7 1325	7.9
l	12" - No odor.					
7'-10'	No recovery.					
10'-12'	22" - Light brown, sandy clay, no odor, soft, moist.	3	10'-12'	22"	3-3-3-5 1345	
	2" - No recovery.					
12'-15'	No recovery.					9.2
*15'-17'	24" - Light brown, sandy clay, slight fish odor, barley soft, wet at 16.5'.	4	15'-17'	24"	2-4-4-4 1350	13.6
17'-20'	No recovery.					
20'-22'	24" - Light brown, sandy clay, slight fish odor, barely soft, wet but more so at 21'.	5	20'-22'	24"	2-3-3-3 1400	13.8
22'-25'	No recovery.					
*25'-27'	24" - Light brown, sandy clay, more pronounced fish odor, soft, saturated.	6	25'-27'	24"	2-3-22 1410	21.0
	This is below water table.					
	Set well at 29'					
	*Soil samples submitted from noted depth intervals.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

MWDEP-5B

April 3, 2003 Client: West Virginia DEP/OER Date: Project No.: 02-0119-003 Project: PPG Industries, Inc. Field Engr/Geo: M. Kauffer Natrium, West Virginia Location: **Driller:** Rick Moore Water Level Information **Auger Rig** Immediate: 21' At Completion: Method:

Depth	De intime (Metarial)		Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
0-2'	10" - Light brown, sandy clay with cinder patch 8"-10" down, no odor, medium stiff, dry.	1	0-2'	10"	3-3-5-7 0755	5.0
	14" - No recovery.					
2'-5'	No recovery.					
5'-7'	12" - Light brown, sandy clay, no odor, medium stiff, dry. 12' - No recovery.	2	5'-7'	12"	3-3-5-5 0810	7.8
7'-10'	No recovery.					
*10'-12'	20" - Light brown, sandy clay, no odor, medium stiff, moist.	3	10'-12'	20"	1-2-3-5 0820	8.4
l	6" - No recovery.					
12'-15'	No recovery.					
15'-17'	24" - Light brown, sandy clay, slight fish odor, medium stiff to soft at 16', moist to wet at 16' down.	4	15'-17'	24"	0830	7.5
17'-20'	No recovery.					
*20'-22'	18" - Light brown, sandy clay, slight odor, soft, wet at 21'.	5	20'-22'	18"	1-3-2-2 0840	9.7
	6" - No recovery.					
22'-25'	No recovery.					
25'-27'	24" - Light brown, sandy clay, slight fish odor, wet, saturated. below water table.	6	25'-27'	24"	2-2-3-2 0850	15.4
	T.D. 66'					
	*Soil samples submitted from noted depth intervals.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

MWDEP-6A

Client: West Vir

West Virginia DEP/OER

Date:

Project:

Project No.:

March 25, 2003

Location:

PPG Industries, Inc.

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02-0119-003 M. Kauffer

Natrium, West Virginia

Field Engr/Geo:

Driller:

Rick Moore

**Water Level Information** 

Method:

Auger Rig

Immediate:

16'

At Completion:

Depth	Description of Materials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-2'	2" - Light brown, sandy clay, no odor, soft, moist.	1	0-2'	24"	1-1-1-6 1410	22.8
:	20" - White/light grey, chalk-like, material, odd odor, soft, moist.					
<u> </u> 	2" - Light brown, sandy clay, slight odor, medium stiff, moist.					
2'-5'	No recovery.					į
5'-7'	20" - Light brown, sandy, clay, slight odor, medium stiff, slightly moist.	2	5'-7'	20"	6-8-7-8 1420	21.8
ļ	4" - No recovery.					į
7'-10'	No recovery.					
10'-12'	18" - Light brown, sandy clay, slight odor, soft, very moist.	3	10'-12'	18"	1-3-3-3 1435	22.0
	6" - No recovery.					
12'-15'	No recovery.					
15'-17'	18" - Light brown, sandy clay, slight odor, soft, wet at 16'.	4	15'-17'	18"	1-1-1-2 1445	22.6
	6" - No recovery.					
17'-20'	No recovery.					
*20'-22'	18" - Light brown, sandy clay, slight odor, soft.	5	20'-22'	18"	1-1-1-1 1500	26.5
į	6" - No recovery.					
}	·					
	*Soil samples submitted from noted depth intervals.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

Immediate:

**BORING NUMBER:** 

MWDEP-6B

Client: West Virginia DEP/OER

Date: March 26, 2003

Project:

PPG Industries, Inc.

Project No.:

02-0119-003

Location:

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Field Engr/Geo:

M. Kauffer

**Driller:** 

Natrium, West Virginia

Water Level Information

Method:

Rick Moore
Auger Rig

16'

At Completion:

Depth			Samp	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
0-2'	17" - Light brown, sandy clay, no odor, medium stiff, moist.	1	0-2'	18"	3-3-4-6 0810	13.5
	1" - White/light grey, chalk-like material, slight odor, soft, moist.					
	6" - No recovery.					
2'-5'	No recovery.		,			
5'-7'	20" - Light brown, sandy clay, slight odor, medium stiff, moist.	2	5'-7'	20"	3-5-6-6 0825	35.4
1	4" - No recovery.					
7'-10'	No recovery.					
10'-12'	22" - Light brown, sandy clay, slight odor, medium stiff, very moist at 11.5'.	3	10'-12'	22"	4-5-7-6 0835	16.1
12'-15'	No recovery.					
*15'-17'	24" - Light brown, sandy clay, slight odor, soft wet at 16'.	4	15'-17'	24"	1-1-1-2 0850	24.3
17'-20'	No recovery.					
20'-22'	24" - Light brown, sandy clay, slight odor, soft, saturated.	5	20'-22'	24"	1-1-4-2 0900	24.3
22'-25'	No recovery.			; ;		
*25'-27'	22" - Light brown, sandy, clay, slight odor, soft, saturated.	6	25'-27'	22"	1-1-1-1 0910	7.4
	2" - No recovery.					
27'-30'	No recovery.					
30'-32'	Sand upheaval prevents split spoon sampling,	7	30'-32'	0"		
	No more samples taken.					
	TD=62' - Rockbed encounted					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-1

Client:	West Virginia DEP/OER			Date: March 04, 20	03	
Project:	PPG Industries, Inc.			Project No.: 02-011	19-003	
Location:	Natrium, West Virginia			Field Engr/Geo: M. K	auffer	
Driller:	Roy Fox	Water Level Information				
Method:	GeoProbe	Immediate:	17'	At Completion:		

Depth	D dia C.M		Samp	le	(Time) Blow	PID or FID	
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)	
*0-4'	15" - Light brown, sandy clay with coarse grain, no odor, medium stiff, moist.	1	0-4'	36"	1330	4.2	
	21" - Light brown, silty sand with coarse grain gravel, no odor, soft, moist.						
	12" - No recovery.						
4'-6'	12" - Light brown, sandy clay with occasional coarse grain gravel, no odor, medium stiff, moist.	2	4'-6'	24"	1340	2.5	
	12" - Light brown, silty sand, fine grain gravel, no odor, soft, moist. Note: Charcoal patch at approximately 5.5'-5.8'.						
	4" - No recovery.						
6'-8'	No recovery.						
8'-10'	20" - Light brown, silty sand, occasional coarse grain gravel, no odor, soft, moist. Dark charcoal patch at 9.5' (4" long).	3	8'-10'	20"	1345	3.5	
10'-12'	No recovery.			ł			
*12'-14'	24" - Light brown, silty sand with occasional fine grain gravel (pea gravel size), dark charcoal-like patches throughout (2"-3"), no odor, moist, soft.	4	12'-14'	24"	1400	2.9	
14'-16'	No recovery.						
16'-18'	24" - Light brown, silty sand, fine grain gravel from 17.5'-18', no odor, soft, moist than wet at 17'.	5	16'-18'	24"	1420	2.5	
18'-20'	No recovery.						
20'-22'	20" - Light brown, silty sand, no odor, wet, soft.	6	20'-22'	24"	1440	2.2	
22'-24'	No recovery.						
	*Samples submitted from noted depth interval.				·		

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-1 (Continued)

Client:	West Virginia DEP/OER			Date: March	04, 2003	
Project:	PPG Industries, Inc.			Project No.:	02-0119-003	
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer	
Driller:	Roy Fox	Water Level Information				
Method:	GeoProbe	Immediate:	17'	At Completion:		

Depth			Samp	le	(Time)	PID or FID	
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)	
24'-26'	24" - Light brown, silty sand, no odor, wet, soft, black charcoal-like patch at 25' (4"-6" long).	7	24'-26'	24"	1500	3.8	
26'-28'	No recovery.						
28'-30'	24' - Light brown, silty sand, no odor, more moist than wet, soft.	8	28'-30'	24"	1520	2.5	
30'-32'	No recovery.						
32'-34'	24" - Light brown, silty sand, wet, no odor, soft, black charcoal-like zone at 33.5'-34'.	9	32'-34'	24"	1535	2.5	
34'-36'	No recovery.			1			
36'-38'	24" - Light brown, silty sand with coarse grain gravel, wet but not water table, no odor, soft.	10	36'-38'	20"	1600	4.1	
	4" - No recovery.						
38'-40'	No recovery.			İ			
40'-42'	3" - Light brown, sandy clay with coarse grain gravel, wet, no odor, medium stiff.	11	40'-42'	18"	1620	2.1	
	15" - Light brown, silty sand, fine and coarse grain gravel, no odor, wet, soft.						
	6" - No recovery.						
42'-44'	No recovery.						
44'-46'	24" - Light brown, silty sand, no odor, soft, wet, coarse grain gravel, below water table.	12	44'-46'	24"	1640	3.1	
46'-48'	No recovery.						
:							
	*Soil samples submitted from noted depth interval.						

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-2

Client: West Virginia DEP/OER Date: March 4, 2003 Project No.: 02-0119-003 Project: PPG Industries, Inc. Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia Driller: **Roy Fox** Water Level Information GeoProbe Immediate: 13' At Completion: Method:

Depth	Description of Materials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	36" - Light brown, sandy clay with coarse grain gravel, no odor, medium stiff, moist.	1	0-4'	36"	0850	3.7
4'-6'	6" - Light brown, sandy clay with coarse grain gravel, no odor, medium stiff, moist.	2	4'-6'	18"	0900	2.5
6'-8'	No recovery.					
8'-10'	24" - Light brown, silty sand with charcoal- like patch at approximately 9' (1" long), no odor, soft, very moist at 9'.	3	8'-10'	24"	0910	2.8
10'-12'	No recovery.					
12'-14'	24" - Light brown, silty sand, charcoal-like patch 13'-14', no odor, wet, soft.	4	12'-14'	24"	1920	2.3
14'-16'	No recovery.					
16'-18'	18" - Light brown, silty sand, no odor, soft, wet.	5	16' -18'	18"	0930	2.1
	6" - No recovery.					
18'-20'	No recovery.			ŀ		
*20'-22'	24" - Light brown, silty sand, no odor, soft, wet, black charcoal patches throughout.	6	20'-22'	24"	0940	4.0
22'-24'	No recovery.					
24'-26'	24" - Light brown, silty sand, no odor, occasional coarse grain gravel, soft, wet, charcoal patch at 24.5' (3" long).	7	24'-26'	24"	1000	2.1
26'-28'	No recovery.					
28'-30'	24" - Light brown, silty sand, no odor, wet, soft with coarse grain gravel, charcoal-like patch at 29.5'-30.0'.	8	28'-30'	24"	1020	2.4
30'-32'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

SB-2 (Continued)

Client: West Virginia DEP/OER Date:

**Project:** 

Project No.:

02-0119-003

Location:

PPG Industries, Inc.

Field Engr/Geo: M. Kauffer

Driller:

Natrium, West Virginia

**Roy Fox** 

Water Level Information

Method:

GeoProbe

Immediate:

13'

At Completion:

March 4, 2003

Depth	Description of Materials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
32'-34'	24" - Light brown, silty sand, charcoal-like patch at 32.5'-33.5', no odor, wet, soft. Note: coarse and fine grain gravel throughout.	9	32'-34'	24"	1035	2.0
34'-36'	No recovery.					
36'-38'	20" - Light brown, silty sand, coarse and fine grain sand, no odor, soft, wet.	10	36'-38'	24"	1100	1.8
}	4" - No recovery.					
38'-40'	No recovery.					
40'-42'	20" - Light brown, silty sand, coarse and fine grain gravel, no odor, soft, wet.	11	40'-42'	20"	1125	1.6
42'-44'	No recovery.			·		
44'-48'	30" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, wet.	12	44'-48'	30"	1200	2.3
	*Soil samples submitted from noted depth					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-3

March 03, 2003 Date: Client: West Virginia DEP/OER Project No.: 02-0119-003 Project: PPG Industries, Inc. Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia Driller: **Roy Fox** Water Level Information 24' Immediate: 20' At Completion: Method: GeoProbe

Depth			Sampl	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	2" - Gravel from road bed, no odor, hard, dry.	1	0-4'	30"	1120	2.0
	28" - Light brown, sandy clay, no odor, moist, medium stiff with occasional coarse grain gravel.					
	18" - No recovery.					
4'-6'	8" - Light brown, sandy clay, no odor, medium stiff, moist.	2	4'-6'	8"	1130	1.2
	16" - No recovery.					ļ
6'-8'	No recovery.					
8'-10'	5" - Light brown, sandy clay with coarse grain gravel, no odor, soft, moist.	3	8'-10'	8"	1140	2.0
	3" - Light brown, silty sand with coarse and fine grain gravel, no odor, wet, soft.					
	16" - No recovery.			Ì		
10'-12'	No recovery.					
12'-14'	15" - Light brown, silty sand, no odor, soft, very moist.	4	12'-14'	15"	1150	2.7
	9" - No recovery.					
14'-16'	No recovery.					į
16'-18'	24" - Light brown, silty sand with some fine grain gravel, no odor, soft, very, moist, charcoal-like patch at 16'-17'.	5	16'-18'	24"	1205	3.2
18'-20'	No recovery.					
20'-22'	24" - Light brown, silty sand, no odor, soft, wet or approaching wet, dark charcoal-like patch at 20'-20.5'.	6	20'-22'	24"	1240	2.3
22'-24'	No recovery.					
24'-26'	24" - Light brown, silty sand, no odor, soft, wet, water in tube.	7	24'-26'	24"	1300	2.5
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

SB-3 (Continued)

Client:West Virginia DEP/OERDate:March 3, 2003Project:PPG Industries, Inc.Project No.:02-0119-003Location:Natrium, West VirginiaField Engr/Geo:M. Kauffer

Driller: Roy Fox Water Level Information

Method: GeoProbe Immediate: 20' At Completion: 24'

Depth	Description of Materials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
26'-28'	No recovery.					
28'-32'	30" - Light brown, silty sand with dark charcoal-like patches at 29' and 30'. Patches range 3" - 6" each, no odor, soft, wet.	8	28'-32'	30"	1320	2.5
	18" - No recovery.					
32'-36'	36" - Light brown, silty sand with dark charcoal-like patch from 34'-35', no odor, soft, wet.	9	32'-36'	36"	1345	2.7
	12" - No recovery.					
36'-38'	24" - Light brown, silty sand with dark charcoal-like patch at 37'-38', no odor, wet, soft.	10	36'-38'	24"	1405	2.1
38'-40'	No recovery.					
40'-42'	24" - Light brown, silty sand with coarse grain gravel, no odor, soft, wet.	11	40'-42'	24"	1425	1.7
42'-44'	No recovery.					
*44'-48'	30" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, wet.	12	44'-48'	30"	1450	3.0
	18" - No recovery.					
	Set PZ-5 at 48'.					
	Check at 1540.					
	Gave 31' bgs.					
	*Soil samples submitted from noted depth interval.			:		

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-4

Client:	West Virginia DEP/OER			Date: March	6, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water I	Level Information	
Method:	GeoProbe	Immediate:	21'	At Completion:	

Depth	Description of Materials		Sampl	le	(Time) Blow	PID or FID	
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)	
*0-2'	24" - Light brown, sandy clay with coarse grain gravel, no odor, medium stiff, moist.	1	0-2'	24"	1330	4.8	
2'-4'	No recovery.						
4'-8'	No recovery				1340		
8'-12'	No recovery, used small rods to push rock out of way.				1350		
12'-14'	8' - Light brown, silty sand, no odor, moist, soft.	2	12'-14'	8"	1415	4.6	
	16" - No recovery.						
14'-16'	No recovery.						
16'-18'	15" - Light brown, silty sand with fine grain gravel, no odor, very moist, soft.	3	16'-18'	15"	1430	4.5	
18'-20'	No recovery.						
20'-22'	20' - Light brown, silty sand with fine and coarse grain gravel, no odor, wet, soft, wet at 21'.	4	20'-22'	20"	1440	4.7	
22'-24'	No recovery.						
24'-28'	30" - Light brown, silty sand, no odor, wet, soft.	5	24'-28'	30"	1455	4.8	
	18" - No recovery.						
	Note: Black charcoal-like patch at 25'-25.5'.						
28'-32'	30" - Light brown, silty sand, no odor, wet, soft.	6	28'-32'	30"	1515	4.9	
	18" - No recovery						
32'-34'	24" - Light brown, silty sand, no odor, wet, soft.	7	32'-34'	24"	1535	4.5	
	Note: Black charcoal patches 2"-6" throughout.						
	*Soil samples submitted from noted depth interval.						

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE

Charleston, WV 25304 Phone: (304) 342-1400, Fax: (304) 343-9031

BORING NUMBER: SB-4 (Continued)

		_					
Client:	West Virginia DEP/OER			Date:	March	6, 2003	
Project:	PPG Industries, Inc.			Project No	0.:	02-0119-003	
Location:	Natrium, West Virginia			Field Eng	r/Geo:	M. Kauffer	
Driller:	Roy Fox	Water Level Information					
Method:	GeoProbe	1mmediate:	21'	At Comp	letion:		

Depth			Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
34'-36'	No recovery.					
36'-40'	36" - Light brown, silty sand, no odor, soft, wet.	8	36'-40'	36"	1600	5.5
*40'-42'	24" - Light brown, silty sand with coarse grain gravel, no odor, soft, wet.	9	40'-42'	24"	1620	6.5
42'-44'	No recovery.					
44'-48'	36" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, moist.	10	44'-48'	36"	1640	5.7
	·					
	*Soil samples submitted from noted depth interval.					

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-5

Client:	West Virginia DEP/OER			Date: Februa	ry 10, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water I	Level Information	
Method:	GeoProbe	Immediate:	13'	At Completion:	

Depth	Description of Manager		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-2'	12" - Loam topsoil, no odor, soft, moist.	1	0-2'	24"	1310	4.2
2'-4'	No recovery.					
4'-8'	No recovery.				1315	
8'-10'	6" - Light brown, sandy clay with coarse grain gravel, no odor, soft, moist.	2	8'-10'	6"	1320	Not enough sample taken
	18" - No recovery.					
10'-12'	No recovery.					
12'-14'	12" - Light brown, sandy clay with coarse grain gravel, no odor, soft, moist.	3	12'-14'	24"	1340	4.1
	12" - Light brown, sand with coarse grain gravel, no odor, soft, wet.					
14'-16'	No recovery.					
16'-18'	24" - Light brown sand, no odor, wet, soft.	4	16'-18'	24"	1400	4.6
18'-20'	No recovery.					
20'-22'	24" - Light brown sand with coarse grain gravel, no odor, wet, soft.	5	20'-22'	24"	1420	5.2
22'-24'	No recovery.					
24'-26'	18" - Light brown sand, coarse grain gravel, no odor, wet, soft.	6	24'-26'	18"	1430	
26'-28'	No recovery.					į
28'-30'	24" - Light brown sand with coarse grain gravel and dark charcoal-like patches (longest 1.5' long) throughout, no odor, soft, wet.	7	28'-30'	24"	1450	Not enough sample taken
30'-32'	No recovery.					
32'-36'	48" - Light brown sand, coarse grain gravel, pockets of charcoal-like material, no odor, wet, soft.	8	32'-36'	48"	1500	5.1
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

SB-5 (Continued)

West Virginia DEP/OER Client:

Date:

**Project:** 

February 10, 2003

Location:

PPG Industries, Inc.

Project No.:

02-0119-003

Natrium, West Virginia

Field Engr/Geo: M. Kauffer

Driller:

**Roy Fox** 

Water Level Information

Method:

GeoProbe

Immediate:

13'

At Completion:

Depth			Sampl	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*36'-40'	48" - Light brown sand, coarse grain gravel, dark pockets, no odor, wet, soft.	9	36'-40'	48"	1520	5.4
40'-44'	48" - Light brown sand, coarse grain gravel, no odor, wet, soft.	10	40'-44'	48"	1540	5.0
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-6

	-			
West Virginia DEP/OER			Date: Februa	ary 10, 2003
PPG Industries, Inc.			Project No.:	02-0119-003
Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Roy Fox		Water Le	vel Information	
GeoProbe	Immediate:	17'	At Completion:	
	PPG Industries, Inc. Natrium, West Virginia Roy Fox	PPG Industries, Inc. Natrium, West Virginia Roy Fox	PPG Industries, Inc.  Natrium, West Virginia  Roy Fox Water Le	PPG Industries, Inc.  Natrium, West Virginia  Roy Fox  Project No.:  Field Engr/Geo:  Water Level Information

Depth			Sampl	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	24" - Light brown, Sandy clay, no odor, moist, soft with coarse grain gravel.	1	0-4'	24"	1050	4.3
	24" - No recovery.					
4'-8'	12" - Light brown, sandy clay with coarse grain gravel, no odor, moist, soft.	2	4'-8'	12"	1050	3.9
	36" - No recovery.					
8'-10'	24" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, moist.	-3	8'-10'	24"	1105	2.1
10'-12'	No recovery.					
12'-14'	24" - Light brown, sandy clay with coarse grain gravel, moist, soft, no odor.	4	12'-14'	24"	1115	3.9
14'-16'	No recovery.					
*16'-18'	18" - Light brown, sandy clay with coarse gravel, moist, soft, wet, no odor.	5	16'-18'	24"	1120	5.1
	6" - Light brown, sandy clay.					
18'-20'	No recovery.					
20'-22'	24" - Light brown, sandy clay, no odor, soft to medium stiff, wet.	6	20'-22'	24"	1130	5.0
22'-24'	No recovery.					
	Watertable at approximately 17'.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**SB-7 BORING NUMBER:** 

Cl' 4	West Vissis DED/OED			Date: Febru	ary 12, 2003
Client:	West Virginia DEP/OER			- Date: Febru	ary 12, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	vel Information	
Method:	GeoProbe	Immediate:	12.5'	At Completion:	

Depth			Samp	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-2'	10" - Light brown, sandy clay, no odor, moist, soft.	1	0-2'	30"	0830	2.6
<u>.</u>	20" - Light brown, sandy clay with coarse and fine grain gravel, no odor, moist, soft.					
2'-4'	No recovery.					
4'-6'	24" - Light brown, sandy clay with coarse and fine grain gravel, no odor, moist, soft.	2	4'-6'	24"	0840	3.5
6'-8'	No recovery.					
8'-10'	20" - Light brown, silty sand with coarse and fine grain gravel, no odor, moist to wet, soft.	3	8'-10'	20"	0850	5.2
10'-12'	No recovery.					
*12'-14'	18" - Light brown, silty sand with coarse and fine grain sand, no odor, wet at 12.5', soft.	4	12'-14'	18"	0910	NA
14'-16'	No recovery.					
16'-20'	36" - Light brown, silty sand, coarse and fine grain gravel, no odor, wet, soft. Note: Definitely below water table.	5	16'-20'	36"	0925	3.2
20'-24'	30" - Light brown, silty sand with coarse and fine grain sand, no odor, wet, soft.	6	20'-24'	30"	0945	3.2
24'-26'	36" - Light brown, silty sand with coarse and fine grain sand, no odor, wet, soft.	7	24'-26'	26"	1010	2.9
26'-28'	No recovery.					
28'-32'	30" - Light brown, silty sand with coarse and fine grain gravel, no odor, wet, soft.	8	28'-32'	30"	1025	Not taken
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE

Charleston, WV 25304 Phone: (304) 342-1400, Fax: (304) 343-9031

BORING NUMBER: SB-8

February 27, 2003 West Virginia DEP/OER Date: Client: Project No.: 02-0119-003 **Project:** PPG Industries, Inc. Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia Driller: **Roy Fox** Water Level Information 17' At Completion: Method: GeoProbe Immediate:

Depth			Sampl	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-2'	24" - Light brown, sandy clay with coarse and fine grain gravel, unknown odor, moist, soft.	1	0-2'	24"	1500	3.3
2'-4'	No recovery.					
4'-6'	4" - Light brown, Sandy clay with coarse and fine grain gravel, unknown odor, moist, soft.	2	4'-6'	8"	1510	N/A
	4" - Light brown, silty sand with fine and coarse grain gravel, odor, moist, soft.					
İ	16" - No recovery.					
6'-8'	No recovery.					
8'-10'	6" - Light brown silty sand with coarse grain gravel, odor - not petroleum, moist, soft.	3	8'-10'	6"	1515	3.2
10'-12'	No recovery.					
12'-14'	18" - Light brown, silty sand, odor, very moist, soft.	4	12'-14'	18"	1525	4.8
	6" - No recovery.					
14'-16'	No recovery.					
16'-18'	18" - Light brown, silty sand, dark charcoal-like patch 2" thick at 17', slight odor, soft, wet.	5	16'-18'	18"	1535	10.3
	6" - No recovery.					
18'-20'	No recovery.					
20'-22'	24" - Light brown, silty sand, no odor noticed, soft, wet.	6	20'-22'	24"	1550	6.2
22'-24'	No recovery.					
24'-26'	24" - Light brown, silty sand, no odor noticed, soft, wet, dark charcoal-like patch 3' long at 25.5'.	7	24'-26'	24"	1610	19.1
26'-28'	No recovery.					
	*Soil samples submitted from noted depth interval.					

## Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-8 (Continued)

Client:	West Virginia DEP/OER			Date: February 28, 2003	
Project:	PPG Industries, Inc.			Project No.: 02-0119-003	
Location:	Natrium, West Virginia			Field Engr/Geo: M. Kauffer	
Driller:	Roy Fox		Water L	Level Information	
Method:	GeoProbe	Immediate:	17'	At Completion:	

Depth			Samp	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
28'-30'	24" - Light brown, silty sand, no odor, occasional coarse grain gravel, soft, wet.	8	28'-30'	24"	0830	0.5
30'-32'	No recovery.					
32'-34'	18" - Light brown, silty sand with fine and coarse grain gravel, no odor, soft, wet.	9	32'-34'	18"	0845	0.8
34'-36'	No recovery.					
36'-38'	18" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, wet.	10	36'-38'	18"	0905	0.4
38'-40'	No recovery.					
40'-42'	24" - Light brown, silty sand with fine and coarse grain gravel, no odor, soft, wet.	11	40'-42'	24"	0935	0.8
42'-44'	No recovery.					
*44'-48'	36" - Light brown, silty sand with coarse and fine grain gravel, no odor, wet, soft, water in tube.	12	44'-48'	36"	1000	1.0
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-9

Client:	West Virginia DEP/OER	 Date:	February 28, 2003

Project: PPG Industries, Inc. Project No.: 02-0119-003

Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer

Driller: Roy Fox Water Level Information

Method: GeoProbe Immediate: 14' At Completion:

Depth			Sampl	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	30" - Light brown, sandy clay, no odor, soft, moist.	1	0-4'	30"	1045	1.0
	18" - No recovery.					
4'-6'	6" - Light brown, sandy clay, no odor, soft, moist.	2	4'-6'	18"	1050	1.0
	12" - Light brown, silty sand, no odor, soft, moist.					
	6" - No recovery.					
6'-8'	No recovery.					
8'-10'	24" - Light brown, silty sand, no odor, soft, moist, dark patch at 9'.	3	8'-10'	24"	1100	0.7
10'-12'	No recovery.					
12'-14'	18" - Light brown, silty sand, no odor, soft, wet.	4	12'-14'	18"	1110	0.3 (Limited sample)
14'-16'	No recovery.					
16'-18'	24" - Light brown, silty sand, no odor, soft, wet.	5	16'-18'	24"	1125	2.0
18'-20'	No recovery.					
20'-22'	18" - Light brown, silty sand, no odor, soft, wet.	6	20'-22'	18"	1135	1.9
22'-24'	No recovery.					
24'-26'	18" - Light brown, silty sand, dark blotch (charcoal-like) at 25.5', faint odd odor, soft, wet.	7	24'-26'	18"	1200	1.9
26'-28'	No recovery.					
*28'-30'	12" - Light brown, silty sand, dark blotches (charcoal-like throughout), faint odor, saturated @ approximately 29', soft.	8	28'-30'	24"	1320	1.8
	12" - No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-9 (Co

SB-9 (Continued)

Date: February 28, 2003 Client: West Virginia DEP/OER Project: PPG Industries, Inc. Project No.: 02-0119-003 Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia Water Level Information Driller: Roy Fox Method: GeoProbe Immediate: 14' At Completion:

Depth Interval	Description of Materials	Sample			(Time)	PID or FID
		No.	Depth	Recovery	Blow Counts	(ppm-v/v)
32'-34'	24"- Light brown, silty sand, coarse grain gravel, no odor.	9	32'-34'	24"	1320	1.8
34'-36'	No recovery.			į		
36'-38'	24" - Light brown, silty sand with fine grain gravel, slight odor.	10	36'-38'	24"	1400	2.6
38'-40'	No recovery.			:		
40'-42'	24" - Light brown silty sand, with fine grain gravel, no odor.	11	40'-42'	24"	1400	2.6
42'-44'	No recovery.					
44'-46'	20" - Light brown, silty sand with coarse and fine grain gravel, no odor.	12	44'-46'	20"	1420	0.8
46'-48'	No recovery.					
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	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-10

Client:	West Virginia DEP/OER			Date: February 27, 2003			
Project:	PPG Industries, Inc.			Project No.: 02-0119-003			
Location:	Natrium, West Virginia			Field Engr/Geo: M. Kauffer	r		
Driller:	Roy Fox	Water Level Information					
Method:	GeoProbe	Immediate:	16'	At Completion:			

Depth			Sampl	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	36" - Light brown, sandy clay, no odor, moist, medium stiff.	1	0-4'	36"	1050	2.3
4'-6'	15" - Light brown, sandy clay, no odor, medium stiff, moist.	2	4'-6'	15"	1130	3.2
6'-8'	No recovery.					
8'-10'	6" - Light brown, sandy clay, coarse fine gravel, moist, no odor.	3	8'-10'	6"	1140	3.0
10'-12'	No recovery.		i i			
*12'-14'	6" - Light brown, sandy clay with fine coarse grain gravel, soft, moist.	4	12'-14'	6"	1150	3.4
14'-16'	No recovery.					
16'-18'	2" - Light brown, silty sand, no odor, wet, soft.	5	16'-18'	2"	1205	4.2
18'-20'	No recovery.					
20'-22'	1" - Light brown, silty sand, no odor, wet, soft.	6	20'-22'	1"	1215	
22'-28'	No recovery.					
28'-30'	2" - Light brown, silty sand, no odor, wet, soft.	7	28'-30'	2"	1320	5.0
30'-32'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-11

Client: West Virginia DEP/OER

Project: PPG Industries, Inc.

Project No.: 02-0119-003

Location: Natrium, West Virginia

Field Engr/Geo: M. Kauffer

Driller: Roy Fox

Water Level Information

20'

At Completion:

Immediate:

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	30" - Light brown, sandy clay, no odor, moist, medium stiff.	1	0-4"	30"	1510	4.3
4'-6'	18" - Light brown, sandy clay with sandstone, no odor, moist, medium stiff.	2	4'-6'	18"	1520	
6'-8'	No recovery.					
8'-10'	6" - Light brown, silty sand with coarse grain gravel, no odor, soft, moist.	3	8'-10'	6"	1530	3.1
10'-12'	No recovery.					
12'-14'	24" - Light brown, silty sand, fine, coarse grain gravel, no odor, wet.	4	12'-14'	24"	1535	7.6
14'-16'	No recovery.					
16'-18'	24" - Light brown, silty sand, fine and coarse grain gravel, no odor, soft, very moist.	5	16'-18'	24"	1545	6.8
18'-20'	No recovery.					
20'-24'	30" - Light brown, silty sand, no odor, soft, wet.	6	20'-24'	30"	1600	7.4
	18" - No recovery.					
24'-26'	24" - Light brown, silty sand, no odor, soft, wet.	7	24'-26'	24"	1615	6.6
26'-28'	No recovery.					
28'-30'	24" - Light brown, silty sand, no odor, sandstone core approximately 1" at 29', wet, soft.	8	28'-30'	24"	0820	3.8
30'-32'	No recovery.					
32'-36'	24" - Light brown, silty sand, no odor, wet, soft.	9	32'-36'	30"	0840	5.1
	3" - Charcoal-like layer, no odor, wet, soft.					
	3" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, wet.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

Method:

GeoProbe

SB-11 (Continued) **BORING NUMBER:** 

Client:	West Virginia DEP/OER			Date: Februa	ary 27, 2003	
Project:	PPG Industries, Inc.			Project No.:	02-0119-003	
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer	
Driller:	Roy Fox	Water Level Information				
Method:	GeoProbe	Immediate:	20'	At Completion:		

Depth			Samp	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*36'-40'	36" - Light brown, silty sand with fine coarse grain gravel, odd odor, soft, wet. Water has smell.	10	36'-40'	36"	0900	4.0
	12" - No recovery.					
40'-42'	24" - Light brown, silty sand with five and coarse grain gravel, odd odor, soft, wet.	11	40'-42'	24"	0930	2.9
42'-44'	No recovery.					
44'-48'	36" - Light brown, silty sand with coarse and fine grain gravel, odd odor, wet, soft.	12	44'-48'	36"	1000	3.7
	12" - No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE

Charleston, WV 25304 Phone: (304) 342-1400, Fax: (304) 343-9031

BORING NUMBER: SB-12

Client:	West Virginia DEP/OER	-		Date: Februa	ary 14, 2003			
Project:	PPG Industries, Inc.			Project No.:	02-0119-003			
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer			
Driller:	Roy Fox		Water Level Information					
Method:	GeoProbe	Immediate:	12'	At Completion:				

Depth	Description of Materials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	36" - Light brown, sandy clay, moist, no odor, medium stiff.	1	0-4'	36"	0825	3.9
4'-6'	20" - Light brown, sandy clay, moist, no odor, medium stiff.	2	4'-6'	24"	0835	2.3
	4" - Light brown, sand with coarse and fine grain gravel, wet, no odor.					
6'-8'	No recovery.					
8'-10'	22" - Light brown, silty sand with coarse and fine grain gravel, wet, no odor.	3	8'-10'	22"	0845	1.6
10'-12'	No recovery.			1		1
12'-14'	24" - Light brown, silty sand, coarse and fine grain gravel, saturated, no odor.	4	12'-14'	24"	6900	2.2
14'-16'	No recovery.			:		
16'-18'	20" - Light brown, silty sand, with fine grain gravel, no odor, soft, saturated.	5	16'-18'	20"	0920	0.8
18'-20'	No recovery.					
20'-22'	24" - Light brown, silty sand with fine and coarse grain gravel, no odor, soft, saturated.	6	20'-22'	24"	0935	1.2
22'-24'	No recovery.					
24'-28'	30" - Light brown, silty sand, with coarse and fine grain sand, no odor, soft, saturated.	7	24'-28'	30"	1015	1.1
28'-30'	24" - Light brown, silty sand, with coarse and fine grain gravel, no odor, soft saturated.	8	28'-30'	24"	1035	1.4
30'-32'	No recovery.					
32'-36'	36" - Light brown, silty clay with coarse and fine grain gravel, wet, no odor, soft.	9	32'-36'	36"	1050	
	12" - No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

SB-12 (Continued) **BORING NUMBER:** 

		-			
Client:	West Virginia DEP/OER			Date: Februa	ry 14, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Lev	el Information	
Method:	GeoProbe	Immediate:	12'	At Completion:	

Depth	Description CM Assista		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
36'-38'	24" - Light brown ,silty clay with coarse and fine grain gravel, no odor, wet, soft.	10	36'-38'	24"	1115	1.0
38'-40'	No recovery.					
40'-42'	24" - Light brown, silty sand, coarse and fine grain gravel, no odor, wet, soft. Black patch at 41'.	11	40'-42'	24"	1140	0.7
42'-44'	No recovery.					
*44'-46'	24" - Light brown, silty sand, coarse and fine grain gravel, odd odor, soft, saturated (wet).	12	44'-46'	24"	1200	0.2
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc. 2300 MacCorkle Avenue, SE

Charleston, WV 25304

BORING NUMBER: SB-13

Client:	West Virginia DEP/OER	Date: Februa	ry 11, 2003		
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	vel Information	
Method:	GeoProbe	Immediate:	7'	At Completion:	

Depth	Decement on of Matarials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-2'	2"- Light brown loam, topsoil, no odor, moist, soft.	1	0-2'	24"	0900	5.8
	22" - Light brown, sandy clay, no odor, moist, soft.					
2'-4'	No recovery.					
4'-8'	40" - Light brown, sandy clay, no odor, moist to wet at 6.5'-7', soft. Note: Coarse grain gravel at wet zone.	2	4'-8'	40"	0920	4.7
8'-10'	6" - Light brown, sandy clay with coarse grain gravel, no odor, wet, soft.	3	8'-10'	6"	0930	
10'-32'	No recovery		10'-32'			
32'-36'	2" - Light brown silty sand, fine and coarse grain gravel, wet, no odor, soft.	4	32'-36'	2"	1120	
*36'-40'	48" - Light brown, silty sand, with fine and coarse grain gravel, no odor, soft, wet.	5	36'-40'	48"	1200	3.5
						·
	·					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-14

Client:	West Virginia DEP/OER			Date: February 11, 2003			
Project:	PPG Industries, Inc.			Project No.: 02-0119-003			
Location:	Natrium, West Virginia			Field Engr/Geo: M. Kauffer			
Driller:	Roy Fox	Water Level Information					
Method:	GeoProbe	Immediate:	6'	At Completion:			

Depth	D		Sampl	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	12" - Dark sandy loam with organic material, no odor, soft, moist.	1	0-4'	48"	1345	6.3
	36" - Light brown, sandy clay, no odor, moist, soft.					
4'-8'	36" - Light brown, sandy clay, no odor, moist to wet at 6', soft.	2	4'-8'	36"	1400	5.3
	12" - No recovery.					
8'-10'	12" - Light brown, sandy clay, no odor, very wet, soft, sandstone, at bottom of 9'.	3	4'-8'	12"	1410	Not enough to sample
	12" - No recovery.					}
10'-12'	No recovery.					
12'-14'	6" - Light brown, sandy clay, no odor, soft, wet.	4	12'-14'	18"	1420	4.1
	12" - Light brown, silty sand, no odor, soft, wet.					
	6" - No recovery.					
14'-16'	No recovery.					ł
16'-18'	24" - Light brown, silty sand with fine and coarse grain gravel, no odor, wet, soft. Also several charcoal-like patches, 1"-2" at most.	5	16'-18'	24"	1430	5.1
18'-20'	No recovery.					
20'-22'	24" - Light brown, silty sand, fine coarse grain gravel, no odor, wet. Dark patches - charcoal-like throughout, largest 2" long.	6	20'-22'	24"	1450	3.8
22'-24'	No recovery.					
24'-26'	24"- Light brown silty sand with fine coarse grain gravel. Dark charcoal-like patch at 24.5' (3" long), no odor, wet, soft.	7	24'-26'	24"	1500	3.2
26'-28'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-14 (Continued)

Client:	West Virginia DEP/OER			Date: Februa	ary 11, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Lev	el Information	
Method:	GeoProbe	Immediate:	6'	At Completion:	

Depth			Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
28'-32'	30" - Light brown, silty sand, coarse and fine grain gravel, no odor, wet, soft.	8	28'-32'	30"	1530	4.0
Ì	18" - No recovery.					
32'-34'	24" - Light brown, silty sand, coarse and fine grain gravel, no odor, wet, soft.	9	32'-34'	24"	1550	4.9
34'-36'	No recovery.					
36'-40'	36" - Light brown, silty sand, coarse and fine grain gravel, no odor, saturated wet, soft.	10	36'-40'	36"	1620	6.0
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-15

Client:	West Virginia DEP/OER			Date: March	7, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			_ Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	vel Information	
Method:	GeoProbe	Immediate:	Unknown	At Completion:	

Depth	D 11 AN 11		Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	6" - Blacktop with limestone base, no odor, medium stiff, dry.	1	0-4'	30"	1130	2.9
	24" - Light brown, sandy clay, no odor, moist, medium stiff.					
	18" - No recovery.				-	
4'-8'	30" - Light brown, sandy clay with coarse grain gravel, no odor, soft, very moist.	2	4'-8'	30"	1140	3.8
į	18" - No recovery.		,			
8'-10'	1" - No sample - rock		8'-10'	1"	1150	2.3
į į	23" - No recovery.					
10'-16'	No recovery - rock					
16'-18'	24" - Light brown, silty sand with coarse grain gravel, black patch at 17' (3" long), no odor, very moist, approaching wet.		16'-18'	24"	1220	12.5
18'-20'	No recovery.					
20'-22'	24" - Light brown, silty sand, no odor, moist, soft.		20'-22'	24"	1300	4.1
22'-24'	No recovery.					
24'-26'	18" - Light brown, sand with charcoal-like patch at 24.5'-25', loose, moist, no odor.		24'-26'	18"	1320	19.1
26'-28'	No recovery.					
*28'-30'	24" - Light brown, silty sand with coarse grain gravel, no odor, loose, moist.		28'-30'	24"	1340	2.9
30'-32'	No recovery - refusal at 32'.					
	*Soil samples submitted from noted depth					
	interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

SB-16 **BORING NUMBER:** 

March 7, 2003 Client: West Virginia DEP/OER Date:

Project No.: 02-0119-003 **Project:** PPG Industries, Inc.

Field Engr/Geo: M. Kauffer

Natrium, West Virginia Driller: **Roy Fox** Water Level Information

Method: GeoProbe Immediate: Unknown At Completion:

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	8" - Dark cinder-like, coal-fine like material, no odor, soft, moist.	1	0-4'	30"	0830	3.0
	22" - Light brown, sandy clay, no odor, moist, medium stiff.					
	18" - No recovery.					
4'-6'	18" - Light brown, sandy clay, no odor, medium stiff, moist. Coarse and fine grain gravel at 5'.	2	4'-6'	18"	0845	2.5
	6" - No recovery.					
6'-8'	No recovery.					
8'-10'	6" - Light brown, sandy clay with coarse grain gravel, no odor, medium stiff, moist.	3	8'-10'	6"	0850	2.4
	18" - No recovery.					
10'-12'	No recovery.					
12'-14'	24" - Light brown, silty sand with coarse grain gravel, no odor, moist, loose.	4	12'-14'	24"	0910	2.9
14'-16'	No recovery.					
16'-18'	24" - Light brown, silty sand with occasional coarse grain gravel, no odor, loose, moist.	5	16'-18'	24"	0920	4.8
18'-20'	No recovery.					
20'-22'	24" - Light brown, silty sand with occasional coarse grain gravel, no odor, loose, moist.	6	20'-22'	24"	0940	3.5
22'-24'	No recovery.					
24'-26'	24" - Light brown, silty sand, no odor, loose, very moist.	7	24'-26'	24"	1000	4.2
26'-28'	No recovery.					
*28'-30'	24" - Light brown, silty sand with dark charcoal-like patches throughout, no odor, loose, very moist.	8	28'-30'	24"	1020	4.4
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

Location:

BORING NUMBER: SB-16 (Continued)

Client:	West Virginia DEP/OER	-		Date: Marcl	n 7, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			- Field Engr/Geo	: M. Kauffer
Driller:	Roy Fox	_	Water Le	vel Information	
Method:	GeoProbe	Immediate:	Unknown	At Completion:	

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
30'-32'	No recovery.					
32'-34'	15" - Light brown, silty sand with high coarse grain gravel content, no odor, loose, very moist.	9	32'-34'	15"	1040	5.6
	9" - No recovery.					
	Refusal at 33.5' on gravel.					
				:		
			•			
	*Soil samples submitted from noted depth interval.		:			

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** SB-17

Client:	West Virginia DEP/OER			Date: March 1	4, 2003
Project:	PPG Industries, Inc.				2-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water L	evel Information	
Method:	GeoProbe	Immediate:	17'	At Completion:	

Depth	Description of Manager		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	4" - Light grey, sandy gravel, no odor, soft, dry.	1	0-4'	36"	0730	1.0
	32" - Light brown, sandy clay, very slight sewage odor, medium stiff, moist.					
l	12" - No recovery.					
4'-8'	32" - Light brown, sandy clay, no odor, medium stiff, moist.	2	4'-8'	36"	0740	3.5
	4" - Light brown sand, no odor, soft, moist.					
	12" - No recovery.					
8'-10'	3" - Light brown, sandy clay with coarse grain sandstone at 3", no odor, hard, moist.	3	8'-10'	3"	0750	5.6
	21" - No recovery.					
10'-12'	No recovery.					
12'-14'	2" - Sandstone, hard, no odor, dry.					
	4" - Light brown, silty sand with coarse grain gravel, no odor, soft, moist.	4	12'-14'	6"	0810	3.8
	18" - No recovery.			:		
14'-16'	No recovery.					
16'-18'	20" - Light brown, silty sand with some coarse grain gravel, no odor, moist then wet at 16.5', soft.	5	16'-18'	20"	0820	7.8
	4" - No recovery.					
18'-20'	No recovery.					
20'-22'	24" - Light brown, silty sand with fine grain gravel, no odor, wet, soft. Dark charcoal-like patch at 21.5'-22'.	6	20'-22'	24"	0835	19.1
22'-24'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc. 2300 MacCorkle Avenue, SE

Charleston, WV 25304 Phone: (304) 342-1400, Fax: (304) 343-9031

BORING NUMBER: SB-17 (Continued)

Client:	West Virginia DEP/OER	_		Date: March	14, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox	_	Water Lev	el Information	
Method:	GeoProbe	Immediate:	17'	At Completion:	

Depth			Samp	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
24'-26'	24" - Light brown, silty sand with occasional fine and coarse grain gravel, no odor, wet, soft. Dark charcoal patch 3" from bottom.	7	24'-26'		0900	15.1
26'-28'	No recovery.					
*28'-30'	18" - Light brown, silty sand with coarse grain gravel, dark charcoal patches throughout, no odor, wet, soft.	8	:	18"	0920	8.2
1	6" - No recovery.					
30'-32'	No recovery.					
	Refusal on rock.					
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	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** SB-18

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Client:	West Virginia DEP/OER			Date: March	13, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water I	Level Information	
Method:	GeoProbe	Immediate:	6'	At Completion:	

Depth	Description of Manager		Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	6" - Cinder-like material, no odor, soft, moist.	1	0-4'	36"	1550	0.7
	6" - Limestone, no odor, hard dry.					
	24" - Light brown, sandy clay, no odor, medium stiff, no odor, medium stiff, moist.					
}	12" - No recovery.					
4'-6'	24" - Light brown, sandy clay, no odor, soft, moist then wet at 5.5'.	2	4'-6'	24"	1600	1.8
6'-8'	No recovery.				:	
8'-10'	12" - Light brown, silty sand with coarse grain gravel, no odor, soft, wet.	3	8'-10'	12"	1610	4.1
1	12" - No recovery.					
10'-12'	No recovery.					
12'-14'	24" - Light brown, silty sand with coarse and fine gravel, no odor, soft, wet.	4	12'-14'	24"	1620	2.0
14'-16'	No recovery.					
16'-18'	24" - Light brown, silty sand with fine grain gravel, no odor, soft, very moist.	5	16'-18'	24"	1630	6.2
18'-20'	No recovery.					
20'-22'	24" - Light brown, silty sand with fine grain gravel, no odor, soft, very moist.	6	20'-22'	24"	1650	4.2
22'-24'	No recovery.					
24'-28'	36" - Light brown, silty sand with occasional coarse grain gravel, no odor, soft, very moist Light brown, silty sand with	7	24'-28'	36"	1700	5.5
	12" - No recovery.				, i	
	*Soil samples submitted from noted depth interval.					

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BORING NUMBER: SB-18 (Continued)

Client:	West Virginia DEP/OER			Date: March	13, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	evel Information	
Method:	GeoProbe	Immediate:	6'	At Completion:	

Depth Interval	Description of Materials		Sampl	le	(Time) Blow	PID or FID
Interval		No.	Depth	Recovery	Counts	(ppm-v/v)
*28'-30'	24" - Light brown, silty sand with coarse grain gravel, no odor, soft, very moist.	8	28'-30'	24"	1725	6.3
	*Soil samples submitted from noted depth interval.					
30'-32'	No recovery.					!
32'-36'	No recovery - Refusal at 33'	9				
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-19

Client:	West Virginia DEP/OER	•		Date: March	12, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	vel Information	
Method:	GeoProbe	Immediate:	5'	At Completion:	

Depth	David Control		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	6" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, moist.	1	0-4'	36"	0730	4.0
	30" - Light brown, sandy clay, no odor, medium stiff, moist.					
	12" - No recovery.			1		
4'-6'	24" - Light brown, sandy clay with coarse grain gravel, no odor, soft, moist then wet at approximately 5'.	2	4'-6'	25"	0750	3.6
6'-8'	No recovery.			t .		
8'-10'	12" - Light brown, silty sand with high concentration of coarse grain gravel, no odor, soft, wet.	3	8'-10'	12"	0810	5.5
	12" - No recovery.				i	
10'-12'	No recovery.					
12'-14'	2" - Light brown, silty sand with coarse grain gravel (looks like quartz), no odor, soft, wet.	4	12'-14'	2"	0830	1.2
	22' - No recovery.					
14'-16'	No recovery.					
16'-18'	24" - Light brown, silty sand with some coarse grain gravel, no odor, soft, wet to very moist.	5	16'-18'	24"	0845	18.2
18'-20'	No recovery.					
20'-24'	36" - Light brown, silty sand with occasional fine grain (pea size) gravel, no odor, wet, soft.	6	20'-24'	36"	0900	15.4
	12" - No recovery.					
24'-28'	30" - Light brown, silty sand, no odor, soft, wet.	7	24'-28'	30"	0920	17.1
	18" - No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** 

SB-19 (Continued)

Client: West Virginia DEP/OER

Project: PPG Industries, Inc.

Project No.: 02-0119-003

Eigld Engr/Cook M. Kouffer

Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer

Driller: Roy Fox Water Level Information

Method: GeoProbe Immediate: 5' At Completion:

Depth			Sampl	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
28'-30'	24" - Light brown, silty sand, no odor, wet, soft with sandstone gravel at 30'.	8	28'-30'	24"	0940	15.5
30'-32'	No recovery.					
32'-34'	24" - Light brown, silty sand with coarse grain gravel (quartz and sandstone), no odor, soft, wet.	9	32'-34'	24"	1000	50.14
34'-36'	No recovery.			1		
	Refusal at 35' on what looks like quartz.					
						. 1
			-			
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-20

		_			
Client:	West Virginia DEP/OER			Date: Februa	ry 24, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water L	evel Information	
Method:	GeoProbe	Immediate:	25'	At Completion:	

Depth			Samp	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	30" - Light brown, sandy clay with coarse grain gravel, no odor, wet due to snow melts, medium stiff.	1	0-4'	48"	1100	2.0
	18" - Dark brown, sandy clay, "staining", dry, slight odor, medium stiff.				i	
4'-8'	2" - Dark brown stained, sandy clay, slight odor, medium stiff, dry.	2	4'-8'	40"	1115	3.5
	38" - Light brown, sandy clay, no odor, moist to very moist at 7.5'.					
8'-10'	12" - Light brown, sandy clay, very moist to wet at 9', coarse grain gravel at 9', no odor, soft.	3	8'-10'	24"	1125	3.1
	12" - Light brown sand, no odor, wet, soft.					
10'-12'	No recovery.			!		
12'-14'	12" - Light brown sand, coarse and fine grain gravel, no odor, soft, wet.	4	12'-14'	12"	1135	Not enough sample
	12" - No recovery.					
14'-16'	No recovery.					
16'-18'	24" - Light brown sand, coarse and fine grain gravel, dark charcoal-like patch at 17' (3" long), wet, no odor, soft.	5	16'-18'	24"	1145	19.2
18'-20'	No recovery.					
20'-22'	20" - Light brown sand, fine and coarse grain gravel, wet, no odor, soft.	6	20'-22'	20"	1200	3.1
	4" - No recovery.		-			
24'-26'	24" - Light brown sand, coarse and fine grain gravel, no odor, soft, wet.	7	24'-26'	24"	1225	18.9
26'-28'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** SB-20 (Continued)

Date: February 24, 2003 Client: West Virginia DEP/OER Project No.: 02-0119-003 **Project:** PPG Industries, Inc. Natrium, West Virginia Field Engr/Geo: M. Kauffer Location: Water Level Information **Driller: Roy Fox** Immediate: 25' At Completion: Method: GeoProbe

Depth	Description of Manager		Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
28'-30'	24" - Light brown sand, fine grain gravel, no odor, soft, wet.	8	28'-30'	24"	1310	4.1
30'-32'	No recovery.					
32'-34'	18" - Light brown sand with coarse and fine grain gravel, soft, wet, no odor.	9	32'-34'	18"	1330	6.4
34'-36'	No recovery.					
36'-38'	18" - Light brown sand with coarse and fine grain gravel, soft, wet, no odor.	10	36'-38'	18"	1400	2.1
38'-40'	No recovery.					
*40'-44'	30' - Light brown sand (sand darker than any previous), slight odor, soft, wet.	11	40'-44'	30"	1430	16.9
44'-46'	10" - Light brown sand with darker color than before 40', odd odor, wet, soft.	12	44'-46'	12"	1510	5.6
	2" - Same sand with coarse and fine grain gravel.					
46'-48'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-21

Client: West Virginia DEP/OER Date: February 13, 2003

Project: PPG Industries, Inc. Project No.: 02-0119-003

Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer

Driller: Roy Fox Water Level Information

Method: GeoProbe Immediate: 6'-7' At Completion: 12'

Depth	Description of Managina		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	40" - Light brown, sandy clay, moist, no odor, medium stiff.	1	0-4'	40"	0840	0.7
	8" - No recovery.					
4'-8'	48" - Light brown, sandy clay, moist to very moist (wet) at 6', no odor, medium stiff to soft at 6'.	2	4'-8'	48"	0900	1.0
8'-10'	15" - Light brown, sandy clay, very moist, no odor, soft.	3	8'-10'	20"	0910	0.6
	5" - Light brown, silty sand, coarse and fine grain gravel, no odor, soft, wet.					
10'-12'	No recovery.					
*12'-14'	20" - Light brown, silty sand, fine and coarse grain gravel, no odor, soft, saturated.	4	12'-14'	20"	0920	0.8
14'-16'	No recovery.					
16'-18'	24' - Light brown, silty sand, no odor, wet, soft, fine and coarse grain gravel.	5	16'-18'	24"	0935	0.7
18'-20'	No recovery.					
20'-22'	20" - Light brown, silty sand, fine and coarse grain gravel, wet, no odor, soft.	6	20'-22'	20"	0950	1.0
	4' - No recovery.					
22'-24'	No recovery.					
24'-26'	20" - Light brown, silty sand, fine and coarse grain gravel, wet, no odor, soft.	7	24'-26'	20"	1015	0.7
26'-28'	No recovery.					
28'-32'	30" - Light brown, silty sand, fine and coarse grain gravel, no odor, soft, below water table.	8	28'-32'	30"	1035	0.7
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

**BORING NUMBER:** SB-22

Client: West Virginia DEP/OER

Project: PPG Industries, Inc.

Project No.: 02-0119-003

Location: Natrium, West Virginia

Project No.: 02-0119-003

Field Engr/Geo: M. Kauffer

Water Level Information

Driller: Roy Fox Water Level Information

Method: GeoProbe Immediate: 13'-14' At Completion: 13'-14'

Depth			Samp	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	30" - Light brown, sandy clay, occasional coarse grain gravel, no odor, medium stiff, moist.	1	0-4'	30"	1500	1.5
	18" - No recovery.			Ì		
4'-6'	24" - Light brown, sandy clay, no odor, moist, medium stiff.	2	4'-6'	24"	1510	1.0
6'-8'	No recovery.					
8'-12'	30" - Light brown, sandy clay, moist, no odor, medium stiff.	3	8'-12'	30"	1530	1.8
	18" - No recovery.					
*12'-16'	12" - Light brown, sandy clay, moist, no odor, medium stiff.	4	12'-16'	36"	1545	1.0
	24" - Light brown, silty sand, coarse and fine grain gravel, no odor, wet, soft.					
16'-18'	24" - Light brown, silty sand, coarse and fine grain gravel, no odor, looks below water table, soft.	5	16'-18'	24"	1610	1.1
18'-20'	No recovery.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-23

Date: February 12, 2003 **Client:** West Virginia DEP/OER Project No.: 02-0119-003 **Project:** PPG Industries, Inc. Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia Driller: **Roy Fox** Water Level Information 16' Method: GeoProbe Immediate: 6.5' At Completion:

Depth	Description of Materials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	36" - Light brown, sandy clay, no odor, moist, soft to medium stiff.	1	0-4'	36"	1200	5.2
4'-8'	48" - Light brown, sandy clay, no odor, wet at 6.5', medium stiff.	2	4'-8'	48"	1210	4.5
8'-12'	40" - Light brown, sandy clay, no odor, wet, medium stiff.	3	8'-12'	40"	1310	1.2
12'-14'	14" - Light brown, sandy clay, no odor, wet, medium stiff.	4	12'-14'	24"	1330	0.9
	10" - Light brown, silty sand, no odor, wet, soft with coarse and fine grain gravel.					
14'-16'	No recovery.					
16'-18'	6" - Light brown, silty sand with coarse and fine grain gravel, no odor, saturated, soft.	5	16'-18'	6"	1345	1.0
	18" - No recovery.			1		
18'-20'	No recovery.					
20'-22'	18" - Light brown, silty sand with coarse and fine grain gravel, no odor, saturated, soft, below water table.	6	20'-22'	18"	1400	2.7
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	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-24

Client:	West Virginia DEP/OER			Date: March	13, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	vel Information	
Method:	GeoProbe	Immediate:	Unknown	At Completion:	

Depth			Samp	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
0-4'	6" - Black cinder, no odor, soft, moist.	1	0-4'	36"	0720	0.8
	30" - Light brown, sandy clay, no odor, soft, moist.				·	
į	12" - No recovery.					
4'-8'	40" - Light brown, sandy clay, no odor, soft, very moist and wet at approximately 6'.	2	4'-8'	40"	0730	1.2
ŀ	8" - No recovery.					
8'-10'	1" - Light brown, sandy clay, no odor, wet, soft.	3	8'-10'	12"	0740	2.6
	11" - Light brown, silty sand with coarse grain gravel (sandstone), no odor, small amount of water in tube, wet, soft.					
ł	1" - No recovery.					
10'-12'	No recovery.					
12'-16'	No recovery - rock.					
16'-18'	10" - Light brown, silty sand with coarse grain gravel - quartz, no odor, soft except for rocky, very moist.	4	16'-18'	10"	0810	5.7
	14" - No recovery.					
18'-20'	No recovery.					
20'-22'	24" - Light brown, silty sand with fine grain gravel, no odor, soft, very moist.	5	20'-22'	24"	0825	5.1
5						
	*Soil samples submitted from noted depth interval.					

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2300 MacCorkle Avenue, SE Charleston, WV 25304

SB-24 (Continued) **BORING NUMBER:** 

Client:	West Virginia DEP/OER	•		Date: March	13, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			_ Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	vel Information	
Method:	GeoProbe	Immediate:	Unknown	At Completion	

Depth	Denoviration of Washing		Sampl	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
24'-28'	30" - Light brown, silty sand with coarse grain gravel, dark charcoal-like patch at 25.5'-26', soft, nearly wet.	6	24'-28'	30"	0845	12.2
	6" - No recovery. *Soil samples submitted from noted depth interval.					
28'-30'	24" - Light brown, silty sand with coarse grain gravel, dark charcoal-like patches throughout, no odor, wet.	7	28'-30'	24"	0900	29.6
30'-32'	No recovery.					
32'-34'	24" - Light brown, silty sand with coarse grain gravel, no odor, wet, soft, charcoal patches throughout.	8	32'-34'	24"	0930	10.8
34'-36'	No recovery.					
	Refusal on quartz at 36'.					
	*Soil samples submitted from noted depth interval.					

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**BORING NUMBER: SB-25** 

Roy Fox

Date: March 13, 2003 Client: West Virginia DEP/OER

Project No.: 02-0119-003 Project: PPG Industries, Inc.

Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer Driller: Water Level Information

Immediate: 12' At Completion: Method: GeoProbe

Depth	Description of Metacists		Sampl	le .	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	30" - Black cinder fill, no odor, dry, soft.	1	0-4'	30"	1020	2.4
4'-8'	3" - Black cinder fill, no odor, dry, soft.	2	4'-8'	24"	1030	1.3
	6" - Light brown, sandy clay, no odor, moist, soft.					
	15" - Light grey, sandy clay, no odor, very moist, medium stiff.					
8'-12'	12" - Light grey, sandy clay, no odor, very moist, medium stiff.	3	8'-12'	40"	1045	1.4
	28" - Light brown, sandy clay, no odor, medium stiff, soft and very moist to wet at 10.5'.					
	8" - No recovery.					
12'-14'	6" - Sandstone, no odor, hard, wet.	4	12'-14'	24"	1100	2.7
	18" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, wet.					
14'-16'	No recovery.					
16'-18'	15" - Light brown, silty sand with high percentage coarse grain gravel, no odor, soft, wet.	5	16'-18'	15"	1110	1.7
	9" - No recovery.					
18'-20'	No recovery.					
20'-22'	20" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, saturated.	6	20'-22'	20"	1125	2.8
	4" - No recovery.				·	
24'-28'	36" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, wet.	7	24'-28'	36"	1145	4.8
:	12" - No recovery.					
	*Soil samples submitted from noted depth interval.					

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2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-25 (Continued)

Client:	West Virginia DEP/OER			Date: March	13, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water L	evel Information	
Method:	GeoProbe	Immediate:	12'	At Completion:	

Depth	Description (CM to take		Samp	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
28'-30'	24" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, wet.	8	28'-30'	24"	1300	4.0
30'-32'	No recovery.					
32'-34'	15" - Light brown, silty sand.	9	32'-34'	15"	1330	2.9
	9" - No recovery.					
34'-36'	No recovery.					
36'-38'	15" - Light brown, silty sand with coarse grain gravel, no odor, saturated, soft.	10	36'-38'	15"	1400	4.6
	9" - No recovery.					
38'-40'	No recovery.					
*40'-42'	24" - Light brown, silty sand, coarse grain gravel - sandstone, water in tube, soft, below water table.	11	40'-42'	24"	1445	4.1
42'-44'	No recovery.					
	Refusal at 44'.					}
	Set PZ-6 at SB-25 with 20' screen, depth 44'.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-26

Client:	West Virginia DEP/OER			Date: March	12, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Lev	el Information	
Method:	GeoProbe	Immediate:	Unknown	At Completion:	

Depth	David de CM-seide		Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	40" - Light brown, sandy clay, top 12" darker than elsewhere, no odor, medium stiff, moist.	1	0-4'	40"	1250	1.0
	8" - No recovery.					
4'-8'	30" - Light brown, sandy clay, no odor, soft, very moist.	2	4'-8'	30"	1310	1.2
	5" - Light brown, sandy clay, dark cinder like material mixture with coarse and fine grain gravel, no odor, wet, soft.					
	1" - Light brown, silty sand, no odor, soft, very moist.					
	12" - No recovery.					
8'-10'	4" - Light brown, silty sand with coarse grain sandstone at bottom, no odor, soft, moist.	3	8'-10'	4"	1330	1.2
	20" - No recovery.					
10'-20'	No recovery, pulled up golf ball size chunk of flint or similar looking rock.					
*20'-22'	2" - Dark charcoal-like patch, no odor, soft, very moist.	4	20'-22'	18"	1420	2.9
	16" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, very moist.					
	6" - No recovery.					
22'-24'	No recovery.					
24'-32'	No recovery - refusal at 31', granite at end of barrel.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc. 2300 MacCorkle Avenue, SE

Charleston, WV 25304

BORING NUMBER: SB-27

February 26, 2003 Date: Client: West Virginia DEP/OER 02-0119-003 Project No.: **Project:** PPG Industries, Inc. Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia Water Level Information **Driller:** Roy Fox 4' At Completion: 34.5 Method: Immediate: GeoProbe

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	36" - Light brown, sandy clay, no odor, medium stiff, moist.	1	0-4'	36"	0950	5.4
	12" - No recovery.					
4'-8'	28" - Light brown, sandy clay, wet, soft, slight oil odor.	2	4'-8'	36"	1000	4.8
	8" - Light brown, sandy clay with coarse and fine grain gravel, slight odor, wet.					
8'-10'	12" - Light brown, sandy clay with high percentage of coarse grain gravel, no odor, wet, soft.	3	8'-10'	12"	1010	8.1
	12" - No recovery.					
10'-12'	No recovery.					
12'-14'	12" - Light brown, silty sand with high percentage coarse and fine grain gravel, wet, no odor, soft.	4	12'-14'	12"	1020	6.9
14'-16'	No recovery.					
16'-18'	24" - Light brown, silty sand with fine and coarse grain gravel, no odor, soft, wet.	5	16'-18'	24"	1035	4.3
18'-20'	No recovery.					
20'-22'	12" - Light brown sand, no odor, soft, wet.	6	20'-22'	12"	1050	7.8
22'-24'	No recovery.					
*24'-26'	24" - Light brown sand, no odor, wet, soft, bottom 2" has dark charcoal-like zone.	7	24'-26'	24"	1130	23.4
26'-28'	No recovery.					
28'-30'	3" - Dark charcoal-like material, no odor, soft, wet.	8	28'-30'	12"	1150	18.8
	9" - Light brown sand with coarse and fine grain gravel, no odor, wet, soft. *Soil samples submitted from noted depth interval.					
	*Soil samples submitted from noted depth interval.					

#### Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-27 (Continued)

Client:	West Virginia DEP/OER	_		Date: Februa	ary 26, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	
Driller:	Roy Fox		Water l	Level Information	
Method:	GeoProbe	Immediate:	4'	At Completion	:34.5'

Depth	Description of Materials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
30'-32'	No recovery.					
32'-34'	12" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, wet.					
34'-36'	No recovery.					
36'-38'	24" - Light brown sand with coarse and fine grain gravel, odor, soft, wet.					
	Set PZ-4 to 40', water at 34.5					
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	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc. 2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-28

Client:	West Virginia DEP/OER	-		Date: Februa	ary 26, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	vel Information	
Method:	GeoProbe	Immediate:	5'	At Completion:	

Interval	Description of Materials	Sample (Time) Blow			PID or FID	
THICTVAL	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
	36" - Light brown, sandy clay with coarse grain gravel, dark blotches less than 1", no odor, moist, medium stiff. Hit glass at 4'-5', moved 5' east.	1	0-4'	36"	0840	3.3
<b>1</b>	6" - Light brown, sandy clay with coarse grain gravel, dark blotches, oil like odor (faint), moist, medium stiff.	2	4'-6'	18"	0915	3.0
1	12" - Darker, sandy clay with thin plastic trash bag like coves, odor oil like, wet, medium stiff, (very hard drilling).					
	6" - No recovery.					
6'-8'	No recovery.					
	*Soil samples submitted from noted depth interval.					

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2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-29

Client: West Virginia DEP/OER Date: February 13, 2003

Project: PPG Industries, Inc. Project No.: 02-0119-003

Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer

Driller: Roy Fox Water Level Information

Method: GeoProbe Immediate: 16' At Completion:

Depth			Sample		(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	36" - Light brown, sandy clay, indistinguishable odor like SB-30 on 02/04/03, moist, medium stiff, dark patch also like SB-30 at 2.5', patch is 2" long.	1	0-4'	36"	1440	2.6
4'-6'	6" - Darker brown, sandy clay, has odor, moist, medium stiff.	2	4'-6'	6"	1500	4.0
6'-8'	No recovery.					
*8'-10'	6" - Mostly darker brown, sandy clay with paper like material (trash) and what looks like wood chips, odd odor, moist, medium stiff.	3	8'-10'	6"	1510	24.3
10'-16'	No recovery.					
16'-20'	2" - Light brown, silty sand, coarse and fine grain gravel, no odor, wet, soft.	4	16'-20'	2"	1530	1.0
20'-24'	30" - Light brown, silty sand, coarse and fine grain gravel, no odor, saturated, soft.	5	20'-24'	30"	1545	3.9
	Set PZ-2 at 24'.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

SB-30 **BORING NUMBER:** 

February 13, 2003 Client: West Virginia DEP/OER Date:

Project: PPG Industries, Inc. Project No.: 02-0119-003

Field Engr/Geo: Location: Natrium, West Virginia M. Kauffer

Water Level Information **Driller: Roy Fox** 

At Completion: Method: GeoProbe Immediate: 14.5'

Depth	D 141 - 674 - 11		Sampl	e	(Time) PID or FII Blow		
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)	
*0-2'	6" - Darker black, ash-like material, indistinguishable odor, soft, moist.	1	0-2'	24"	1305	1.0	
	18" - Light brown, sandy clay, no odor, medium stiff, moist.						
2'-4'	No recovery.						
4'-6'	20" - Light brown, sandy clay with some coarse grain gravel, no odor, medium stiff, moist to very moist at 5.5'.	2	4'-6'	20"	1320	0.6	
	4" - No recovery.						
6'-8'	No recovery.						
8'-12'	36" - Light brown, sandy clay with coarse and fine grain gravel, no odor, soft, wet at 9'.	3	8'-12'	36"	1330	1.2	
*12'-16'	18" - Light brown, sandy clay with coarse and fine grain gravel, no odor, soft, wet.	4	12'-16'	30"	1315	1.1	
	12" - Light brown, silty sand with coarse and fine grain gravel, no odor, soft, saturated.						
16'-20'	30" - Light brown, silty sand with coarse and fine grain gravel, no odor, saturated, soft.	5	16'-20'	30"	1400	0.6	
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					-		
	*Soil samples submitted from noted depth interval.						

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-31

		_			
Client:	West Virginia DEP/OER			Date: March	5, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water L	evel Information	
Method:	GeoProbe	Immediate:	6'	At Completion:	

Depth			Samp	le	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	8" - Light brown, sandy clay, no odor, soft, moist.	1	0-4'	36"	0900	49.5
	12" - Light grey, lean, sandy clay, no odor, very moist, soft.					
	16" - Dark, sandy, ash-like material, no odor, soft, moist.					
	12" - No recovery.					
4'-8'	30" - Dark black, ash-like material, no odor, soft, wet, saturated at 6'.	2	4'-8'	36"	0905	188
l	12" - No recovery.					
8'-12'	12" - Light grey, sandy clay, no odor, medium stiff, moist.	3	8'-12'	40"	0915	110
	28" - Light brown, lean, sandy clay, no odor, medium stiff, moist.					
	8" - No recovery.					
*12'-16'	48" - Light brown, sandy clay, no odor, soft, very wet at 15'.	4	12'-16'	48"	0930	218
16'-20'	12" - Light brown, sandy clay, no odor, soft, wet.	5	16'-20'	48"	0945	101
1	36" - Light brown, silty sand, no odor, wet.					]
ļ	This entire section below water table.					}
20'-24'	8" - Light brown, silty sand, no odor, soft, wet.	6	20'-24'	48"	1000	183
	40" - Light brown, sandy clay, no odor, soft, wet.					
24'-26'	24" - Light brown, silty sand with coarse grain gravel, slight odor, soft, saturated, water in tube had odor.	7	24'-26'	24"	1020	71.8
26'-28'	No recovery.					
	*Soil samples submitted from noted depth interval.					

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SB-31 (Continued) **BORING NUMBER:** 

		_			
Client:	West Virginia DEP/OER			Date: March	5, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	vel Information	
Method:	GeoProbe	Immediate:	6'	At Completion:	

Depth	Distriction of Managele		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
28'-30'	18" - Light brown, silty sand with coarse and fine grain gravel, slight odor to water in tube.	8	28'-30'	18"	1040	89.9
ļ ·	6" - No recovery.					
30'-34'	No recovery.					
34'-36'	No recovery, refusal at 35.5', hard sandstone in barrel.			·		
					:	
	·				•	
	*Soil samples submitted from noted depth interval.					

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BORING NUMBER: SB-32

Client:West Virginia DEP/OERDate:March 5, 2003Project:PPG Industries, Inc.Project No.:02-0119-003Location:Natrium, West VirginiaField Engr/Geo:M. Kauffer

Driller: Roy Fox Water Level Information

Method: GeoProbe Immediate: 16' At Completion:

Depth			Sampl	e	(Time)	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	8" - Light brown, sandy clay, no odor, soft, moist.	1	0-4'	36"	1330	70.4
	3" - Light grey, sandy clay, no odor, soft, moist.					·
	25" - Dark, ash-like (coal fine like) material, no odor, soft, moist.					
	12" - No recovery.					
4'-6'	15" - Dark, ash-like material, no odor, soft, moist, some coarse grain gravel.	2	4'-6'	15"	1340	165
	9" - No recovery.					
6'-8'	No recovery.			1		
8'-12'	2" - Dark, ash-like (somewhat like coal fines) material, odor - like creosote, soft, very moist.	3	8'-12'	30"	1355	490
	28" - Light brown, sandy clay, odor, very moist, medium stiff.					
	6" - No recovery.					
12' - 16'	48" - Light brown, sandy clay, odor, medium stiff, very moist.	4	12'-16'	48"	1405	291
16'-20'	48" - Light brown, sandy clay, less odor, wet, medium stiff.	5	16'-20'	48"	1430	648
20'-24'	48" - Light brown, sandy clay, odor, wet, medium stiff.	6	20'-24'	48"	1445	278
*24'-28'	48" - Light brown, sandy clay, odor, very soft and wet, visible sheen, coarse and fine grain gravel at 26.5' and on. Refusal at 28.5'.	7	24'-28'	48"	1510	2972
28'-32'	No recovery.					
						i i
					-	
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-33

DORING NUMBER.

Client: West Virginia DEP/OER Date: March 6, 2003

Project: PPG Industries, Inc. Project No.: 02-0119-003

Project: PPG Industries, Inc. Project No.: 02-0119-003

Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer

Driller: Roy Fox Water Level Information

Method: GeoProbe Immediate: 18' At Completion:

Depth	D		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	36" - Dark, sandy coal fine like material, no odor, very moist, soft.	1	0-4'	36"	0830	2.1
4'-8'	30' - Dark, sandy coal fine like material, no odor, wet, soft.	2	4'-8'	30"	0845	3.9
	6" - Light brown, sandy clay, no odor, soft, moist.					
	18" - No recovery.					
8'-12'	12" - Light grey/brown, sandy clay, no odor, medium stiff, moist.	3	8'-12'	36"	0900	2.7
	24" - Light brown, sandy clay, no odor, medium stiff, moist.					
12'-16'	48" - Light brown, sandy clay, no odor, moist, medium stiff.	4	12'-16'	48"	0910	2.9
16'-20'	48" - Light brown, sandy clay, no odor, wet at 17.5', medium stiff to soft at 17.5'.	5	16'-20'	48"	0930	2.8
*20'-24'	48" - Light brown, sandy clay, no odor, saturated, soft.	6	20'-24'	48"	1000	4.6
24'-28'	36" - Light brown, sandy clay, no odor, saturated, soft.	7	24'-28'	36"	1030	5.0
	Refusal on hard rock at 27'					
	·					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-34

Client: West Virginia DEP/OER Date: February 25, 2003

Project: PPG Industries, Inc. Project No.: 02-0119-003

Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer

Driller: Roy Fox Water Level Information

Method: GeoProbe Immediate: 16' At Completion: 20.5

Depth	Description of Metanish		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-2'	6" - Light brown, sandy clay, no odor, soft, wet from snow melt.	1	0-2'	18"	1345	2.6
	12" - Dark, ash-like, sandy soil, no odor, soft, very moist.					
	6" - No recovery.					
2'-4'	No recovery.					
4'-6'	4" - Dark, ash-like, sandy soil, no odor, soft, very moist.	2	4'-6'	18"	1400	2.2
	6" - Light brown sand pocket, no odor, soft, wet.					
	8" - Dark, ash-like, sandy soil with some coarse and fine grain gravel, no odor, saturated (wet), soft.		-			
6'-8'	No recovery.					
8'-12'	40" - Light brown, sandy clay, no odor, moist, medium stiff.	3	8'-12'	40"	1410	5.6
	8" - No recovery.					
12'-16'	48" - Light brown, sandy clay, no odor, moist (wet at 15.5'), medium stiff to soft at 15.5'.	4	12'-16'	48"	1418	6.7
16'-20'	4" - Light brown, sandy clay, no odor, soft, wet.	5	16'-20'	48"	1430	25.2
	36" - Darker, ash-like, sandy soil, no odor, wet, soft.					
	8" - Light brown, sandy clay, no odor, soft, wet.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-34 (Continued)

Date: February 25, 2003 Client: West Virginia DEP/OER Project No.: 02-0119-003 **Project:** PPG Industries, Inc. Location: Natrium, West Virginia Field Engr/Geo: M. Kauffer Water Level Information Driller: **Roy Fox** 20.5 Immediate: 16' At Completion: Method: GeoProbe

Depth	D. ivin colonials		Sampl	e	(Time) Blow	PID or FID
Interval			Depth	Recovery	Counts	(ppm-v/v)
*20'-24'	24" - Light brown, sandy clay, no odor, soft, wet.	6	20'-24'	40"	1445	41.4
	3" - Light brown sand, no odor, wet, soft.					
	13" - Light brown, sandy clay, no odor, soft, wet.					
	8" - No recovery.					
24'-26'	24" - Light brown, sandy clay, odd odor, soft, wet, coarse grain gravel at 25' and on.	7	24'-26'	24"	1505	31.9
26'-28'	No recovery.					
.28'-32'	42" - Light brown, sandy clay with coarse and fine grain gravel, odd odor, saturated, bottom 3" more gravel than clay, water in tube.	8	28'-32'	42"	1530	7.2
	6" - No recovery.					
32'-34'	24" - Light brown, silty sand with coarse and fine grain gravel, water in tube, odd odor, saturated, soft. Refusal at 35.5' on gravel.	9	32'-34'	24"	1600	6.5
34'-36'	No recovery.		·			
	Set PZ-3 at 36', well below water table.					
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-35

February 25, 2003 West Virginia DEP/OER Date: Client: Project No.: 02-0119-003 PPG Industries, Inc. Project: Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia Driller: **Roy Fox** Water Level Information Method: GeoProbe Immediate: 19' At Completion:

Depth	Desired and American		Samp	le	(Time) Blow	PID or FID
Interval	Description of Materials	No.	Depth	Recovery	Counts	(ppm-v/v)
*0-4'	30" - Dark, sandy soil, somewhat like ash, no odor, wet due to melt off, soft.	1	0-4'	30"	0830	2.2
4'-6'	11" - Dark, sandy soil, like ash, no odor, soft, wet.	2	4'-6'	12"	0850	3.1
	1" - Light brown, sandy clay, no odor, wet, soft.					
6'-8'	No recovery.			ļ		
8'-12'	48" - Light brown, sandy clay, no odor, medium stiff, moist, very moist at 12'.	3	8'-12'	48"	0900	8.8
12'-16'	48" - Light brown, sandy clay, no odor, medium stiff, wet.	4	12'-16'	48"	0930	10.5
*16'-20'	24" - Light brown, sandy clay, no odor, soft, wet.	5	16'-20'	48"	1030	9.7
	12" - Dark, sandy soil, like ash, no odor, soft, wet.					
	12" - Light brown, sandy clay, no odor, soft, saturated/wet.					
	Bottom 12" definitely below water table.					
20'-24'	36" - Light brown, sandy clay, no odor, soft, wet. Refusal at 23'.	6	20'-24'	36"	1100	10.1
			-			
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-36

Date: March 10, 2003 Client: West Virginia DEP/OER 02-0119-003 Project No.: **Project:** PPG Industries, Inc. Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia Water Level Information Driller: **Roy Fox** 20 Method: GeoProbe Immediate: 20 At Completion:

Depth	Description (CM) (see let		Samp	le	(Time) Blow	PID or FID
Interval	Description of Materials		Depth	Recovery	Counts	(ppm-v/v)
*0-2'	6" - Light brown, sandy clay, no odor, medium stiff, dry.	1	0-2'	20"	0930	4.8
	4" - Light grey, lean, sandy clay, no odor, moist, soft.					
	10" - Dark cinder like material with coarse grain gravel, no odor, wet, soft.					
	4" - No recovery.					
2'-4'	No recovery.					
4'-8'	30" - Light grey, lean, sandy clay, no odor, soft, very moist.	2	4'-8'	30"	0910	5.1
	18" - No recovery.					
8'-12'	12" - Light grey, lean, sandy clay, no odor, soft, wet.	3	8'-12'	36"	0925	4.8
	1" - Layer of fine grain gravel.					
	24" - Light brown, sandy clay, no odor, moist, medium stiff.					
1	12" - No recovery.					
12'-16'	48" - Light brown, sandy clay, slight odor of sewage, stiff, approaching wet.	4	12'-16'	48"	0995	7.1
*16'-20'	48" - Light brown, sandy clay, same slight sewage odor, stiff, looks wet at 19' but difficult to tell. Refusal at 19.8' on hard pack clay.	5	16'-20'	48"	1000	7.0
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-37

March 10, 2003 Date: West Virginia DEP/OER Client: 02-0119-003 PPG Industries, Inc. Project No.: **Project:** Field Engr/Geo: M. Kauffer Location: Natrium, West Virginia **Water Level Information Driller: Roy Fox** At Completion: 13' Immediate: 13' Method: GeoProbe

Depth			Sampl	e	(Time) Blow	PID or FID
Interval			Depth	Recovery	Counts	(ppm-v/v)
0-4'	12" - Light brown/grey, sandy clay, no odor, soft, moist.	1	0-4'	36"	1040	3.2
	4" - Dark, cinder like material, no odor, soft wet.					
İ	20" - Light brown, sandy clay.			į		
4'-8'	No recovery, pulled barrels, knocked out rock.	2	4'-8'	0		
8'-12'	48" - Light brown, sandy clay, no odor, stiff, very moist.	3	8'-12'	48"	1110	4.1
12'-16'	48" - Light brown, sandy clay, no odor, mediums stiff, soft at 13', wet (saturated) at 13'.	4	12'-16'	48"	1120	3.8
16'-20'	No recovery. Refusal at 16' on hard rock clay.					
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	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-38

West Virginia DEP/OER Date: March 10, 2003 Client: Project No.: 02-0119-003 Project: PPG Industries, Inc. Natrium, West Virginia Field Engr/Geo: M. Kauffer Location: Water Level Information Driller: **Roy Fox** At Completion: 10'-12' Method: Immediate: 10'-12' GeoProbe

Depth	Description CM (1971)		Sampl	e	(Time)	PID or FID
Interval	Description of Materials		Depth	Recovery	Blow Counts	(ppm-v/v)
*0-4'	36" - Light brown, sandy clay, no odor, medium stiff, moist.	1	0-4'	36"	1310	3.8
	12" - No recovery					
4'-8'	36" - Light brown, sandy clay, no odor, medium stiff, moist to very moist at 6.5'.	2	4'-8'	36"	1320	4.0
	12" - No recovery.					
8'-12'	40" - Light brown, sandy clay, no odor, wet at 10', soft.	3	8'-12'	40"	1335	3.6
ł	8" - No recovery.					
12'-16'	48" - Light brown, sandy clay, no odor, wet, soft.	4	12'-16'	48"	1345	4.8
*16'-20'	48" - Light brown, sandy clay, no odor, wet, soft.	5	16'-20'	48"	1400	5.8
	6" - No recovery, refusal at 19.5' on hard pack clay.					
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	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-39

Client:West Virginia DEP/OERDate:March 11, 2003Project:PPG Industries, Inc.Project No.:02-0119-003Location:Natrium, West VirginiaField Engr/Geo:M. KaufferDriller:Roy FoxWater Level Information

Driller:Roy FoxWater Level InformationMethod:GeoProbeImmediate:11At Completion:11

Depth	Description of Metaricle		Sampl	e	(Time) Blow	PID or FID
Interval	d Description of Materials		Depth	Recovery	Counts	(ppm-v/v)
*0-4'	36" - Light brown, sandy clay, no odor, medium stiff, moist.	1	0-4'	36"	0740	14.1
	12" - No recovery.					
*4'-8'	36" - Light brown, sandy clay, no odor, medium stiff, moist.	2	4'-8'	36"	0755	8.0
	12" - No recovery.					
8'-12'	36" - Light brown, sandy clay, no odor, soft, wet at 11'.	3	8'-12'	36"	0810	6.5
	12" - No recovery.					
12'-16'	48" - Light brown, sandy clay, no odor, soft, wet.	4	12'-16'	48"	0825	8.3
*16'-20'	48" - light brown, sandy clay, no odor, soft, wet.	5	16'-20'	48"	0840	7.0
20'-24'	No recovery, refusal at 20.5' on hard pack clay.	6	20'-24'	0		
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	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-40

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Client:	West Virginia DEP/OER			Date: March	11, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water Le	vel Information	
Method:	GeoProbe	Immediate:	13'	At Completion:	

Depth	Description of Metacials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials		Depth	Recovery	Counts	(ppm-v/v)
*0-4'	6" - Light brown, sandy clay, no odor, soft, moist.	1	0-4'	36"	1000	65.0
	15" - Light grey/white, chalk like clay with some fine grain gravel, odd odor, moist, medium stiff.					
	15" - Light brown, sandy clay, slight odor, moist, medium stiff.					
	12" - No recovery.					
4'-8'	No recovery, pulled barrels up slightly, removed rock.	2	4'-8'	0		
8'-12'	48" - Light brown, sandy clay, no odor, medium stiff, very moist at 11'.	3	8'-12'	48"	1035	3.1
12'-16'	48" - Light brown, sandy clay, no odor, soft at 12.5', wet at 13'.	4	12'-16'	48"	1050	2.4
*16'-20'	48" - Light brown, sandy clay, no odor, soft, wet, refusal at 20' on hard pack clay.	5	16'-20'	48"	1115	1.8
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	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc. 2300 MacCorkle Avenue, SE Charleston, WV 25304

BORING NUMBER: SB-41

Client:	West Virginia DEP/OER			Date: March	11, 2003
Project:	PPG Industries, Inc.			Project No.:	02-0119-003
Location:	Natrium, West Virginia			Field Engr/Geo:	M. Kauffer
Driller:	Roy Fox		Water L	evel Information	
Method:	GeoProbe	Immediate:	14.5'	At Completion:	

Depth	Description of Materials		Sampl	e	(Time) Blow	PID or FID
Interval	Description of Materials		Depth	Recovery	Counts	(ppm-v/v)
*0-4'	2" - Light brown, sandy clay, no odor, soft, moist.	1	0-4'	36"	1300	13.3
	6" - Dark, cinder like material, no odor, soft, moist.		-			
	24" - Light grey/white, chalk like material, odd odor similar to paint thinner, soft, moist.					
	4" - Light brown, sandy clay, odd odor, soft, moist.					
6'-8'	No recovery.	2	6'-8'	0		
4'-6'	3" - Light brown, sandy clay, slight odor, soft, moist.	3	4'-6'	12"	1315	28.2
	3" - Light grey/white, chalky material, odd odor similar to paint thinner, soft, moist.					
	6" - Light brown, sandy clay, slight odor, medium stiff, moist.					
	12" - No recovery.					
8'-12'	1" - White stone, no odor, hard, moist.	4	8'-12'	48"	1450	8.4
	47" - Light brown, sandy clay, slight odor, medium stiff, moist.					
12'-16'	48" - Light brown, sandy clay, slight odor, moist and wet at 14.5', medium stiff and than soft at 14.5'.	5	12'-16'	48"	1510	3.5
*16'-20'	48" - Light brown, sandy clay, slight odor, wet, soft, refusal at 20' on hard pack clay.	6	16'-20'	48"	1530	4.9
	*Soil samples submitted from noted depth interval.					

Potesta & Associates, Inc.

2300 MacCorkle Avenue, SE Charleston, WV 25304